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HOME ECONOMICS SERIES

LESSONS IN COOKERY

DIET FOR ADULTS



BOOK TWO

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LESSONS IN COOKERY
DIET FOR ADULTS

HOME ECONOMICS SERIES

LESSONS IN COOKERY

BOOK TWO DIET FOR ADULTS

By
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Instructor in Home Economics, Murray F. Tuley High School, Chicago



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THE PREFACE

This volume, like the other volumes of the series, *Food Economy*, *Diet for Children*, and *Diet for Invalids*, is designed primarily for the high-school student of home economics. It covers a semester's work, containing forty cooking lessons, two for each week of the semester. No less time than two fifty-minute or two sixty-minute periods is recommended for each lesson. The lessons are planned according to foods in season from February to June. The Appendix contains optional work, to be assigned at the discretion of the teacher as either recitation or home work.

Diet for Adults, which is a consideration of the fuel value of foods, aims to make the calorie a term of practical meaning for the student and housekeeper. (It is well, however, to caution the reader that the calorie-idea in nutrition has its limitations, for diet cannot be measured in terms of calories only. The quantity and quality of protein and mineral salts, and the presence of certain accessory substances, such as vitamins, are just as essential as the fuel value. The fourth book of this series includes a study of mineral salts, vitamins, and other essentials in a normal diet.) The book is divided into two main sections, Hearty Diet and Light Diet, the typical recipes and menus given being based on the approximate fuel values of the foods. A list of suggestions for definite lessons precedes each of the sections. The aim has been to include only such cooking lessons as illustrate the principles of heat units and energy values and thus encourage selective eating. Recipes are grouped according to caloric value. It is not imperative that the topics or the lessons be presented in the order given; season and market conditions often necessitate a change. The lessons in *Diet for Adults* call for more expensive ingredients, on the whole, than the lessons in the other three books of the series. But the instructor may avoid too great an expense for the school by having the pupils bring from home many ingredients, such as left-over protein foods for use in salads and savory soufflés. The author has found that the use of certain materials from home adds greatly to the pupils' interest in the lessons.

The book presupposes little, if any, preliminary training in general science, but offers excellent opportunity for correlating dietetics with such sciences as physics, chemistry, and bacteriology. It is in condensed and summarized form, permitting rapid reading, and has been kept as simple as possible. Some chart work is given, but almost no experimental work. The aim has been to give the recipes in a form that will develop initiative and responsibility in the pupil. The author hopes that the book, whether used in the school or in the home, will be an aid to that kind of teaching which helps the student to help herself. Attention is called to the fact that, from the viewpoint of development of skill in handwork, the recipes in this book are possibly more valuable than the recipes in the other three books of the series.

The author believes in individual rather than group work for the pupil. The class recipes will be found helpful, especially to beginning teachers, and they may also have two uses in the home: as a trial, or test, recipe for the housewife and as a means of teaching a child of almost any age how to cook. Mother and daughter may work at the same time with their respective large and small recipes.

The lessons in the other three books of the series are also arranged in sequence according to season: Book One, September to February; Book Three, September to February; Book Four, February to June. The four books cover a two-year course. Each book is a unit in itself; therefore it is not essential to teach the entire series to a given class of pupils, although it is very desirable to do so. The series is recommended for use by either the younger or the older girls in high school. The author believes, however, that the more mature mind is better fitted for a study of dietetics.

The recipes in the four books have been carefully tested. Bread and butter and relishes, unless specified, are understood in any menus given.

Each of the four books is also published in the form of a loose-leaf "filler" suitable for class use. Loose-leaf books offer great flexibility for the teacher and student, having already proved their value in the botanical and other high-school science laboratories. Such books form a framework for the teaching of any given course, and are time-savers, for the pupil is spared the mechanical copying of such material as charts and recipes. As a sheet is required for a lesson, it is removed from the filler and placed in an inexpensive notebook cover. A loose-leaf laboratory book is distinctly a pupil's book, not a teacher's. Some scheme should be devised for keeping the recipe sheets clean during the lesson period; one way is to post a few extra copies on the wall of the laboratory. The loose-leaf plan allows the teacher to add experimental work if she thinks best, and it also allows space for additional recipes, mounted illustrations, or clippings from newspapers and magazines.

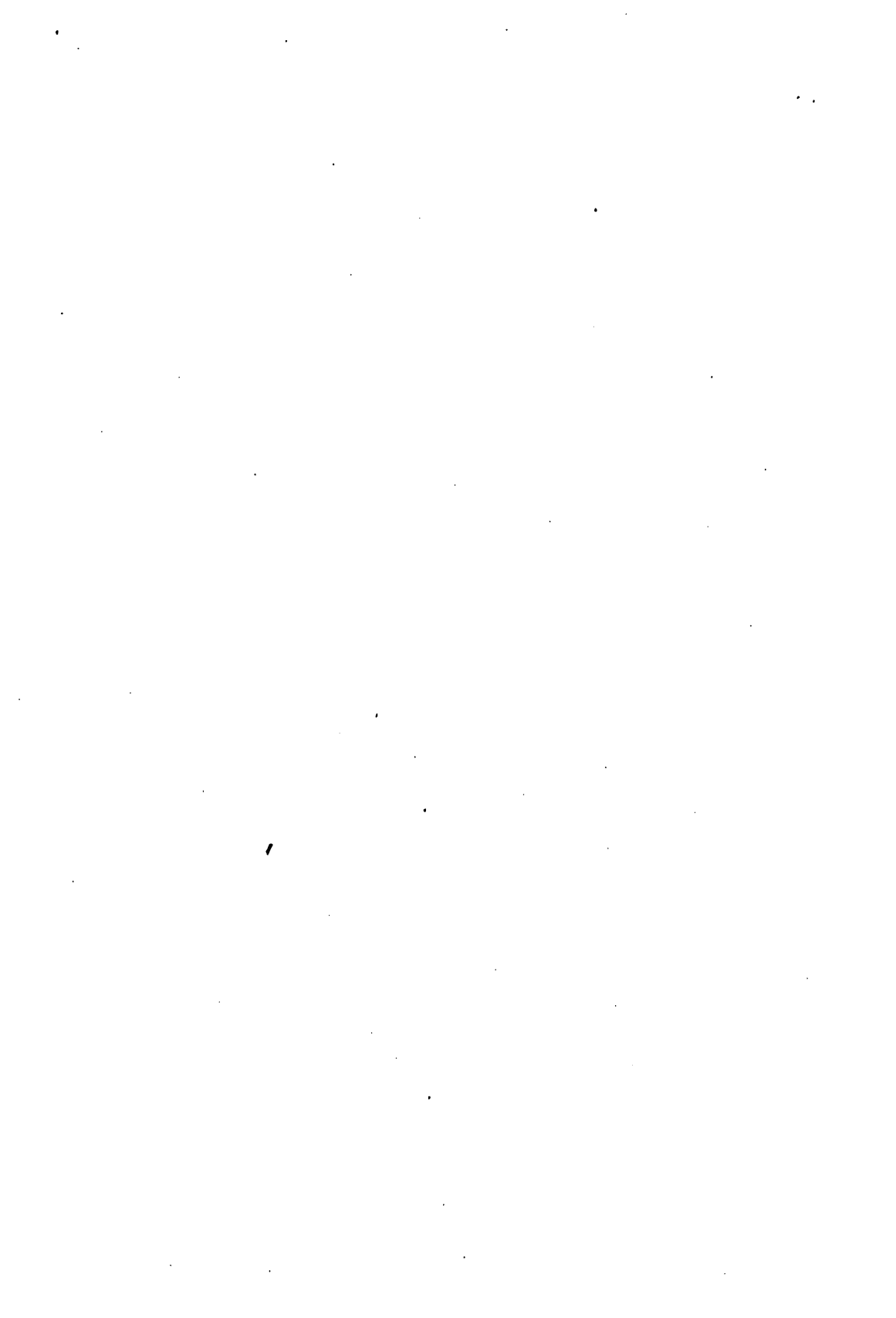
It is hoped that all of the volumes will prove useful to homekeepers. The bound books may be preferred by housewives, the loose-leaf by school girls.

The series is an outgrowth of a number of years' teaching experience in the Wendell Phillips and the Murray F. Tuley High Schools of Chicago. In addition, three years were spent by the author as critic teacher of grade cooking in the Chicago Normal School.

The author wishes to acknowledge her indebtedness to Professor Mary D. Chambers, B.S., A.M., and Dr. A. D. Emmett for their valuable criticism of manuscript and proofs. Recognition is made of the training received at Pratt Institute. Finally, the author wishes to express gratitude to her pupils, whose industry and enthusiasm have given the impetus for the development of the series.

F. E. S.

PART I
INTRODUCTION



DIET FOR ADULTS

CALORIE REQUIREMENTS OF ADULTS¹

Throughout this book, which deals with the energy, or caloric, value of the diet of the normal adult, it is to be understood: (1) that the energy value of a food is dependent upon the quantity of fat, carbohydrate, and protein it contains; (2) that, in the combustion of these three nutrients under definitely controlled conditions, they furnish energy or heat as follows:

1 gram of fat yields.....	9 calories
1 gram of carbohydrate yields.....	4 calories
1 gram of protein yields.....	4 calories

and that in the human body they have in general the same relative values; (3) that the calorie as used here, designated as the great or large calorie, represents the quantity of heat required to raise the temperature of 1 kilogram of water 1° C., or of 4 pounds of water about 1° F.

Energy manifests itself in the form either of heat or of work. In the case of the steam engine, for example, the fuel, or food, gives off heat upon combustion, and this in turn ultimately brings about motion and work. With man, the food consumed requires a certain amount of energy for its mastication, digestion, and assimilation; immediately, there is given up from the food energy, or calories, to warm the body, to assist in carrying out the various metabolic processes, and to aid in accomplishing work.

GENERAL FACTORS GOVERNING ENERGY, OR CALORIE, REQUIREMENTS OF MAN

1. Muscular work done: In adult life this is the most important factor of all (see Note 4, page 6).
2. Maintenance of body temperature or heat regulation: This is a vital factor.
3. Age: Children while growing rapidly and during the adolescent period require more energy-giving foods in proportion to their weight than do adults. On the contrary, the aged require fewer energy-giving foods than other normal adults, partly because of their inactivity.
4. Weight of individual.
5. Extent of body surface.

¹The following works have been used for reference in the preparation of pages 3-6: Carter, Howe, and Mason, *Nutrition and Clinical Dietetics* (1917); Hutchison, *Food and the Principles of Dietetics* (1917); Lusk, *Science of Nutrition* (3d ed., 1917); von Noorden, *Metabolism and Practical Medicine*, Vol. I; Sherman, *Chemistry of Food and Nutrition* (1916).

6. Sex.
7. Climate and seasons.
8. Individual peculiarities.
9. Condition of health.

NORMAL ADULTS: FOOD REQUIREMENTS

The following classification of normal adults is based upon the kind and quantity of muscular work done by the individual (see Note 1, page 5).

I. The very active (requiring hearty, or heavy, diet):

1. Persons doing severe muscular work (and more or less brain work),
(a) chiefly out of doors, (b) mainly indoors, such as:

a. Outdoor life:

Campers
Explorers
Farmers
Firemen
Foresters
Hunters
Lumbermen
Masons
Men sawing wood
Mountain-climbers
Sailors
Soldiers
Street-cleaners

b. Indoor life:

Carpenters
Carriage-makers
Furniture-painters
Laundresses
Mechanics
Metal workers
Plumbers
Pressmen
Stokers

2. Persons taking a great deal of muscular exercise, but chiefly in the form of recreation, such as golf or swimming. This group includes those doing hard brain work or otherwise leading a sedentary life during the work day, such as authors, editors, administrators, etc. This group of individuals cannot afford to take such rich food as those of Group 1. (Pies, doughnuts, gravies, fat meats, etc., may cause digestive disturbances in the case of these sedentary workers, whereas they usually will not do so in the case of persons doing severe muscular work.)

II. *The less active* (requiring semi-hearty diet):

1. Persons who are active, but prone to live chiefly indoors and to lead too sedentary a life. This type of person includes:

Bookbinders

Clerks

Dressmakers, tailors, and milliners

Executives

Housemaids

Professional men (doctors, lawyers, engineers, teachers) (see Note 5)

Shoemakers

Stenographers and bookkeepers

Students

The diet for this group should contain fewer rich foods and more bulky foods.

2. Athletes in training.

III. *Inactive healthy persons* (requiring light diet):

1. Most people in very hot weather. Summer vacation idlers should beware of too hearty a diet.
2. Most people during the spring months, when with many there occurs a general letting down.
3. Old persons, if feeble or inactive.
4. Persons of overweight.

The diets required for these four groups are similar, and in general they may be called light diets for *inactive* sedentary people. (Overweight is often due to a sedentary life.) Protein, as well as fats and carbohydrates, should be reduced in some of the light diets; for example, in diet for the aged.

Notes:

1. Average daily energy requirements for these three diets are as follows:

	CALORIES
Hearty, or high calorie	3,300-5,400
Semi-hearty, or medium-high calorie	2,700-3,400
Light, or low calorie	2,445-2,700

2. The estimate of the calories for the day is calculated from *all* the energy-giving foods, namely, fats, carbohydrates, and protein. In selecting the total food supply for the day, it is necessary to consider the following:

- a. Total calories (furnished by fats, carbohydrates, and protein)
- b. Percentage of total calories furnished by the protein (The general rule has been to provide enough protein in the normal diet to furnish 10-15 per cent of the total calories. Recent work seems to suggest that the lower value [about 10 per cent] provides enough protein if it is of the proper *quality* to furnish the essential amino-acids. If this deduction is justified, it involves an important economic factor, for protein foods are the most expensive ones we buy.)

3. The quantities consumed in the three diets, hearty, semi-hearty, and light, usually are somewhat larger in cold weather; the chief reasons are as follows:

a. The person, as a rule, is more active.

b. Radiation of body heat is often greater.

4. In hot weather the amount of work done bears some relation to the food requirements. That is, if a person works as hard in summer as in winter, the *energy* requirements for the two seasons are about the same; but, on the other hand, the quantity of *protein* foods (meat, etc.) that can be consumed to advantage in hot weather is less.

5. It is not necessary for brain workers or other persons to lead a very sedentary life, since walking, golfing, skating, etc., are possible for most people.

FOODS FOR HEARTY DIET

The foods listed below are high in caloric value and are, as a rule, to be recommended for use in a hearty diet. The list applies in general to camp diet, but refers to any other hearty diet as well.

I. Foods rich in carbohydrates:

Lump and other sugar, sweet chocolate, lemonade, and candies

Marmalades, jams, jellies, and similar sweets

Fruits, especially the dried fruits

Sirups, such as molasses

II. Solid foods rich in one or more of the three foodstuffs, fat, carbohydrates, protein:

Salt pork and other fat meats

Pies and other pastry (see Note 1)

Eggs, sautéed and fried (see Note 2)

Doughnuts, fritters, and other fried foods

Cakes, with filling and frosting

Puddings and sauces

Griddlecakes

Corn-meal mixtures

Cereals and cream

Lean meats

III. Liquid foods more or less rich in the three nutrients, fat, carbohydrates, protein:

Milk

Cream

Nutritious soups (such as cream soups)

Beverages, such as:

Chocolate and cocoa

Coffee and tea (when served with sugar and cream)

Notes:

1. A rich pie is a concentrated food. It may be indigestible in the case of the inactive, sedentary person, but it may be a desirable food for the person leading an active outdoor life. Pie and some other hearty foods are often very useful in the lunch box.

2. Both sautéed and fried eggs may be very wholesome for the camper, farmer, or other person leading an active outdoor life, but they are forbidden the child, and they may prove very difficult of digestion for the sedentary adult.

GENERAL INFORMATION

TABLE OF ABBREVIATIONS

spk. = speck	pkg. = package
d. = drop	h. = heaping
ssp. = saltspoon	b. p. = baking powder
t. = teaspoon	tt. = test-tube
tb. = tablespoon	" = inch
c. = cup	sec. = second
pt. = pint	min. = minute
qt. = quart	hr. = hour
pk. = peck	C. = calorie
oz. = ounce	°C. = degrees Centigrade
lb. = pound	°F. = degrees Fahrenheit
/ denotes a fraction: $\frac{1}{2}$ c. = one-half cup	
- denotes gradation: 1-2 c. = 1 to 2 c.	

TABLE OF MEASURES

dash = one sprinkle	2 c. butter = 1 lb.
4 ssp. = 1 t.	4 c. flour = 1 lb.
3 t. = 1 tb.	2 $\frac{3}{4}$ c. granulated corn meal = 1 lb.
16 tb. = 1 c.	2 c. granulated sugar = 1 lb.
1 c. = 2 gills	2 $\frac{3}{4}$ c. powdered sugar = 1 lb.
2 c. = 1 pt.	1 square Baker's chocolate = 1 lb.
4 c. = 1 qt.	8 eggs, with shells = 1 lb.
1 egg = 4 tb.	10 eggs, without shells = 1 lb.
2 tb. butter = 1 oz.	1 pt. milk or water = 1 lb.
1 pk. apples = 12 $\frac{1}{2}$ lb.	
1 pk. potatoes = 15 lb.	
1 pk. beets = 15 lb.	
1 pk. onions = 14 $\frac{1}{2}$ lb.	
1 pk. carrots = 13 $\frac{3}{4}$ lb.	
1 pk. turnips = 13 $\frac{3}{4}$ lb.	
1 pk. sweet potatoes = 13 $\frac{3}{4}$ lb.	
1 qt. string beans = $\frac{3}{4}$ lb.	

TABLE OF OVEN TEMPERATURES *

OVEN	°F.	°C. (Pupil to supply)
Slow.....	250-350	
Moderate.....	350-400	
Hot, or "quick".....	400-450	
Very hot.....	450-550	

**Technical Education Bulletin 22*, Teachers College, Columbia University, "Some Attempts to Standardize Oven Temperatures for Cookery Processes," by Van Arsdale.

TABLE OF TEMPERATURES

PROCESS	°F.	°C.
Freezing of fruit ices (temperature of medium)	23-18	-5 to -8
Freezing of water	32	0
Whipping of cream	37-50	3-10
Butter-making	60	15-16
Raising of bread (temperature of room)	79-104	26-40
Cheese-making	98.6-140	37-60
Coagulation of albumin	133-160	(Depends upon acidity)
Simmering of water	180-210	Begins 56; completes 71
Soft custards	179-183	82-99
Double boiler, top part	192-201	82-84
Boiling water at sea level	212	89-94
Jellies (boiling point of water, 212° F., or 100° C.)	185	100
Sugar cookery (boiling point of water, 212° F., or 100° C.) .		103
Fondant	235	113
Fudge frosting, boiled	232	111
1 egg white to 1 cup sugar	235-239	113-115
2 egg whites to 1 cup sugar	243	117
1 egg white to 1 cup dark brown sugar	257	125
1 egg white to $\frac{3}{4}$ cup dark brown sugar, $\frac{1}{4}$ cup white . .	252	122
Roasting of meat:†		
Temperature of oven:		
First 15 minutes	450	250
Remainder of time	347	175
Temperature of meat interior:		
Rare done	115.7-140	46.5-60
Medium	140-158	60-70
Well done	158-176	70-80
Deep-fat frying. Temperature of fat for:		
Uncooked foods	347-374	175-190
Cooked foods	365-401	185-205
Cold, wet, uncooked foods	374-383	190-195
Baking. Temperature of center of oven for:		
Sponge cakes	347-374	175-190
Angel-food cakes	302-338	150-170
Soufflés (surrounded by water)	392	200
Bread	356-428	180-220
Butter cakes:		
Loaf	374	190
Layer	410	210
Muffins	428-455	220-235
Parkerhouse rolls	455	235
Baked potatoes	455	235
Baking-powder biscuit	455-464	235-240
Popovers	455-392	235-200
Pastry‡	464	240

*Adapted from *University of Illinois Bulletin*, Vol. XIV, No. 47, "Fats and Oils in Cookery. Cooking Temperatures," by Williams and Gray.

†Elizabeth Sprague and H. S. Grindley, "A Precise Method of Roasting Beef," *University of Illinois Bulletin*, Vol. IV, No. 19.

‡Elizabeth Sprague, "Studies of Methods in Food Preparation," *Journal of Home Economics*, Vol. III, No. 5, page 446.

Notes:

1. Pupil to group baking and other temperatures under the headings slow, moderate, hot, and very hot. (See "Table of Oven Temperatures," page 7.)

2. In which kind of an oven is the temperature more easily controlled, a gas or an electric oven?

METHODS OF COOKING*(Applied to meats and other foods)*

Pupil to supply definitions in the right-hand column, after a study of cookbooks and dictionaries.

METHOD	DEFINITION
Baking.....
Boiling.....
Braising.....
Broiling (pan).....
Broiling (grill).....
Casseroles.....
Fricasseeing.....
Frying.....
Poaching.....
Roasting.....
Sautéing.....
Steaming.....
Stewing.....

Notes:

1. Pupil to group the methods of cooking listed in the foregoing table according to the following headings:

HEAT APPLIED BY MEANS OF HOT WATER OR STEAM	HEAT APPLIED BY MEANS OF HOT FAT	HEAT APPLIED BY MEANS OF HEATED METAL OR OTHER UTENSIL- MATERIAL	HEAT APPLIED DIRECT FROM THE FREE FLAME

Relate the above headings to the terms "cooking by moist heat" and "cooking by dry heat."

2. Pupil to group the methods of cooking according to the following headings (note that these headings deal with the various ways of transmitting heat):

HEAT SECURED CHIEFLY BY CONVECTION CURRENTS	HEAT SECURED CHIEFLY BY CONDUCTION	HEAT SECURED CHIEFLY BY RADIATION

MISCELLANEOUS STATEMENTS

1. Unless otherwise specified, all measurements are level. All leveling of ingredients in cups, spoons, etc., should be done with the flat side of a spatula or other knife, not the edge. Why?

2. Possible reasons for discrepancies which may arise in the recipes are:

a. Lack of standardization as to the size of spoons, measuring cups, etc. (Most saltspoons sold are not of standard size.)

b. Varying degrees to which flour and other ingredients are packed

3. Savory dishes, such as omelets, soufflés, fritters, etc., are unsweetened dishes which, as a rule, contain a seasoning or relish in combination with some vegetable or protein material.

4. A stiff white of egg is one that is beaten to the stage at which it will not fall from an inverted dish. A white of egg beaten with a wire beater is of coarser grain and is at least one-third greater in volume than a white beaten with a Dover beater. *Caution:* Never beat a white of egg so long that it curdles, or separates.

5. In general, the term "fat" as used in this book means butter or a substitute.

6. In most cases the class recipe is placed at the left of the corresponding large recipe.

7. As a rule, all class recipes should be cooked more quickly than the large recipes, proportionately speaking; otherwise they dry out. This applies particularly to the cooking of meats and to baking in general.

8. Note directions for changing °C. to °F., and vice versa (parentheses are used in the second statement, but not in the first):

$$\frac{9}{5}^{\circ}\text{C.} + 32 = ^{\circ}\text{F.}$$

$$\frac{5}{9} (^{\circ}\text{F.} - 32) = ^{\circ}\text{C.}$$

9. *To the Teacher:* Opportunity is given in this book for teaching the principles underlying the cooking of carbohydrates, fats, and proteins, such as:

STARCH	SUGAR	FAT	PROTEIN
Vegetables	Candies	Fried foods	Cheese
Flour mixtures	Frostings	Sautéed foods	Eggs
			Fish
			Legumes
			Meat

PART II
HEARTY DIET

SUGGESTIONS FOR LESSONS

SAUTÉED FOODS

1. Carbohydrate foods (such as corn-meal mush and potato balls)
2. Protein foods (such as fish or liver)
3. Fat meats (such as bacon, ham, or salt pork)

MEATS: TENDER LEAN CUTS

4. Broiled steaks or chops
5. Roast of beef. Franconia potatoes. Yorkshire pudding
6. Stuffed roast poultry

FLOUR MIXTURES

- | | |
|--------------------------------------------------------------------------------------|-----------------|
| 7. Griddlecakes (both sour- and sweet-milk). Waffles | } Thin batters |
| 8. One-egg muffins. Corn bread | |
| 9. Steamed suet puddings | } Thick batters |
| 10. Plain cake and derivatives | |
| 11. Rich cake. Boiled frosting | |
| 12. Baking-powder biscuits (both roll and drop) | } Soft doughs |
| 13. Simple fruit desserts derived from biscuit dough (such as cobbler and shortcake) | |
| 14. Unleavened breads: Hard-tack bread and corn dodgers | |
| 15. Fruit pie (such as apple) | } Stiff doughs |

FRIED FOODS

- | | |
|----------------------------------------------------------|----------------------------|
| 16. Potato croquettes | } Frying of cooked foods |
| 17. Doughnuts. Muffins | |
| 18. French and Saratoga potatoes | } Frying of uncooked foods |
| 19. Timbale cases. Fritters: (a) Savory—such as parsnip; | |
| (b) sweetened—such as apple | |
| 20. Protein foods: Fish, oysters, and cheese-balls | |

CANDIES

21. Fondant
22. Fondant derivatives (such as chocolate creams and bonbons)

MISCELLANEOUS FOODS

23. Boiled dried beans. Soups from beans and other dried legumes
24. Coffee. Sandwiches

SAUTÉED FOODS

SAUTÉED CARBOHYDRATE FOODS

A camp lunch or supper

Boiled fish

Baking-powder biscuits

Cookies

Sautéed corn-meal mush

Dried-fruit jelly

Tea

Any of the following foods, more or less rich in carbohydrate material, may be sautéed (note use of left-overs):

I. Vegetables (see Note 3):

Balls or cakes made of potatoes or other starchy vegetables

Sliced vegetables:

Tomatoes (ripe or unripe)

Cucumbers

Onions

Squash, summer

Potatoes (white or sweet)

Parsnips

Carrots

Vegetables cut in cubes:

Lyonnais potatoes

Vegetable hash

Celery

II. Fruits:

Apples

Bananas (good with roast beef)

Pears

III. Breakfast cereal:

Corn-meal mush

Hominy

Oatmeal

Rice (balls or hash)

IV. Flour mixtures (see Note 4):

Griddlecakes (see page 42)

Green-corn patties (see page 45)

Scones (see page 68)

Notes:

1. In sautéing any foods (see pages 13-21), apply the rules stated in *Food Economy*, "Pan-Broiling and Sautéing," page 63.
2. Note that sautéing is incorrectly called frying.
3. Almost any vegetable (juicy or starchy, parboiled or not) may be either sautéed or fried.
4. If desired, omit Group IV from this outline, since, correctly speaking, flour mixtures are pan-broiled, not sautéed.
5. Lessons 1, 2, 3, 7, 8, 9, 12, 13, 14, 23, and 24, as suggested on page 12, may be used as a basis for a course in camp cooking.

Sautéed Potato Balls or Cakes**Method:**

1. Shape left-over, seasoned mashed potatoes into small, round, flat cakes.
2. Place them in a hot sautéing pan containing a very little hot bacon or other fat.
3. Brown them on both sides, garnish with parsley, and serve.

Notes:

1. Do not turn the cakes until they are very brown on the under side.
2. Avoid more than a small quantity of fat, else the cakes will fall to pieces; this is the secret of success with the recipe.
3. If cakes are too soft to mold, add soft bread crumbs, not cracker crumbs or flour. Cakes that are very moist will not brown. If crumbs are not added, the moisture may be evaporated.
4. Left-over rice, hominy, oatmeal, etc., may be substituted for potato in this recipe. Mash the cooked cereals before using them. Such cereal cakes require bread or cracker crumbs or flour to make them hold their shape; $\frac{1}{2}$ c. flour to $\frac{1}{2}$ c. cereal is sometimes used.
5. If preferred, mix the potato (or other starchy material) with any of the following ingredients before molding:
 - Ground meat or fish
 - Gravy or dressing
 - Rice or hominy
 - Mashed turnip or other vegetable
6. Sometimes it is well to bake potato and other starchy balls rather than to sauté them; dip them in buttered crumbs before baking them.

Sautéed Tomatoes**Method:**

1. Wash and slice ripe or unripe tomatoes.
2. Dip them in flour seasoned with salt and pepper (or dip them in egg and cracker crumbs, if desired).
3. Sauté them in bacon fat or a substitute until they are tender and brown on both sides; a sprinkle of sugar aids in the browning. Avoid cooking them to pieces.
4. Garnish with parsley, and with either of the following sauces, if desired:
 - Brown sauce (brown the flour in pan in which tomatoes were cooked)
 - Hot pepper sauce, thus making deviled tomatoes

Sautéed Onions**Method:**

1. Add thinly sliced onions to very hot drippings, cover, and sauté 4-6 min., or until onions are tender and golden brown.
2. Serve with beefsteak or other meat.

Note:

A good hash is made by sautéing 1-3 min. a mixture of sautéed onions and cooked rice.

Sautéed Vegetable Slices**Method:**

1. Cut left-over cooked potatoes, parsnips, etc., lengthwise in long slices $\frac{1}{4}$ "- $\frac{1}{2}$ " thick.
2. Brown them on both sides in a little bacon fat, and season well. Avoid much fat, else the slices will lose their shape. Cook them in a sautéing pan or in the oven; it is often desirable to brown the slices in a pan with a roast of meat.

Notes:

1. If desired, dip the vegetable in an egg-and-milk mixture before sautéing it.
2. Glazed sweet potatoes are prepared as follows:
 - a. Parboil sweet potatoes 10-20 min., pare, and cut them in half lengthwise.
 - b. Place them in a buttered baking dish, and brush with a thick sirup made by boiling together a mixture of half as much brown sugar as water.
 - c. Add bits of butter, and bake 15 min., or until potatoes are tender and brown. Baste often with sirup.

Left-over cooked potatoes may be used. Glazed carrots and turnips are also good.

Lyonnaise Potatoes**Ingredients:**

- 2 c. raw or cold, cooked potato cubes ($\frac{1}{4}$ "- $\frac{1}{2}$ ")
- Salt and pepper
- 1 tb. chopped onion
- 1 tb. chopped celery
- 1 tb. fat (such as bacon, fat salt-pork or other drippings, butter, etc.)

Method:

1. Brown together in a sautéing pan the fat, onion, and celery.
2. Add the other ingredients and stir them over fire until they are brown.

Notes:

1. If desired, add 1 tb. lemon juice and 1 tb. chopped parsley.
2. An excellent vegetable hash is made by sautéing together the following left-over cooked vegetables, chopped fine or cut in very small cubes:

- | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------|
| <ul style="list-style-type: none"> $1\frac{1}{2}$ c. potatoes $\frac{1}{2}$ c. turnips or parsnips $\frac{1}{2}$ c. beets or carrots $\frac{1}{2}$ c. cabbage | } | drained and dried thoroughly before being sautéed |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------|

Season well with onion or garlic salt, paprika, etc.

A sprinkle of flour is a good browning agent.

Sautéed Apples

Method:

1. Wash apples, core, and slice them.
2. Place bacon fat or a substitute in a sautéing pan, and when it is smoking hot add a single layer of apples.
3. Cover apples, and when they are brown on one side turn and brown them on the other side; salt, and when the apples are about half done, add a little sugar as a browning agent.

Sautéed Breakfast Cereal

Method:

1. As soon as breakfast is over, pack the hot left-over mush in greased molds, such as shallow bread pans or baking-powder cans. (Use a sample baking-powder can for a class recipe.) Cover and cool.
2. When the mush is cold and set, turn it from the molds and cut it in $\frac{1}{8}$ " slices.
3. Dip each slice in flour, and sauté it in bacon fat or any other butter substitute until it is brown on both sides.
4. Serve with butter or gravy as a potato substitute, or with sugar or a sirup (such as caramel, maple, corn, or molasses) as a breakfast or luncheon dish.

Notes:

1. Any of the following ingredients may be stirred into the mush before it is molded:
 - Grated cheese (very good with corn meal)
 - Beaten egg (an excellent binding agent)
 - Salt pork or other meat, cooked and chopped
 - Cracklings from tried-out fat

Scrapple is the name applied to corn-meal mush containing salt pork or other meat.

2. If the mush is very dry, it need not be dipped in flour.

3. Slices of left-over cooked cereal are also good baked or fried; dip them in buttered crumbs before baking, and roll them in egg and then in dry crumbs before frying. Mush may be cut in cubes or other fancy forms for frying, or it may be molded in the hands into round, flat cakes. Scrapple is sautéed, fried, or broiled.

SAUTÉED PROTEIN FOODS

A camp breakfast

Sautéed hash	Oatmeal	Potatoes boiled in jackets
	Toast	Coffee

The following foods, all of which are more or less rich in protein, may be sautéed:

Eggs	Tripe
Fish	Meat or fish hash
Oysters	Beeves' or calves' hearts
Chicken (young)	(sauté over a very low flame)
Rabbit and game birds	Calves' brains
Liver	Etc.
Scallops	

Caution: Avoid prolonging a very high temperature with any protein food, else it is toughened.

Sautéed Fish

Method:

1. Wash fish, dry them, and, if fish are large, cut them in $\frac{1}{2}$ "– $\frac{3}{4}$ " slices, then prepare the slices in 3" squares.
2. Roll each small fish or slice of fish in a mixture of salt, pepper, and flour or corn meal.
3. Sauté the whole or sliced fish in a very little bacon fat 6–10 min., or until they are tender and brown on both sides. Use a low or medium flame. (Why?)

Notes:

If salted herring or other salted fish are used, remove the salt by soaking the fish in water, then proceed with the foregoing method.

Sautéed Oysters

Method:

1. Drain oysters, wipe them with a dry towel, remove any shells, and add salt.
2. Roll oysters in crumbs, then in raw egg (a slightly beaten egg to which 1–2 tb. water has been added), then in crumbs.
3. Place them in a sautéing pan containing a little hot bacon fat, and cook at a low or medium temperature until crumbs are brown. Oysters require but a short period of cooking.
4. Garnish with parsley and paprika.

Notes:

1. Except in the case of the canned product, oysters are seldom adapted to use in camp life.
2. Oysters may also be sautéed as follows:
 - a. Drain oysters, dry, and sprinkle them with pepper.
 - b. Wrap each oyster in a thin slice of bacon and fasten with a toothpick.
 - c. Place them in a moderately hot sautéing pan, and cook just long enough to crisp and curl the bacon.
 - d. Serve on hot buttered toast.
3. *To sauté scallops:* Cover scallops with boiling water and let stand 5 min.; do not allow the water to boil. Drain the scallops, roll them in crumbs, egg, and crumbs, and sauté until they are tender and brown.

Sautéed Chicken, Rabbit, or Small Game Birds

Method:

1. Wash a raw chicken, rabbit, or bird, and separate it at the joints so as to form small sections.
2. Barely cover with salted water, and simmer until meat is tender.
3. Remove meat from the broth, drain, and evaporate all moisture.
4. Sprinkle with salt and pepper.
5. Dip pieces first in flour or other starchy material, then in egg (a slightly beaten egg to which 1-2 tb. water has been added), and lastly in crumbs or other starchy material.
6. Place pieces in a sautéing pan containing a little hot lard or bacon or other drippings; bacon fat is perhaps the most desirable fat. (Why avoid butter?) Cover, and cook about 10 min., or until meat is a golden brown on all sides; turn over the pieces every 2-3 min.
7. Place them on a platter, add melted butter or a thickened gravy made from some of the broth, and garnish with parsley.

Notes:

1. Some cooks prefer the following method for chicken (note that steps 2 and 3 of the foregoing method are omitted):
 - a. Salt and flour pieces of raw chicken, and place them in a sautéing pan containing about $\frac{1}{4}$ lb. hot fat.
 - b. Cover tight, and cook 40 min. over a medium flame, turning the chicken when it becomes very brown on the under side.
 - c. Prepare a milk gravy from what is left in the pan.
 It is wiser not to turn the chicken more than once.
2. Fried chicken or other meat is prepared by submitting the meat to steps 1-5, then browning it in deep fat instead of in the sautéing pan.
3. Sometimes the egg is omitted from the covering for either sautéed or fried meat. In such a case only starchy material is used. This includes:
 - Flour
 - Corn meal
 - Bread or cracker crumbs

Sautéed Liver and Bacon

Method:

1. Cover calf's liver with cold water and let it stand 5 min.; cover beef liver with cold water and let it stand 1-2 hr.
2. Drain, and remove any tough membrane or outer skin.
3. Sauté bacon and place it upon a hot platter.
4. Salt and pepper thin slices of liver, then roll them in flour, corn meal, or bread crumbs. (Why use starchy material?)
5. Pour most of the fat from the bacon pan, turn gas low, add liver, cover, and cook 8 min., or until meat is tender; turn frequently.
6. Place liver on platter with bacon, and garnish with parsley.

Notes:

1. Why not cook liver and bacon in the pan at the same time? Which requires the higher temperature? Why? Which requires the longer period of cooking? Why?
2. Quote price per lb. of each of the following:
 - Beef liver
 - Calf's liver
 - Bacon, choice cut
 - Bacon or ham ends (very economical)
3. Discuss the food value and digestibility of liver.
4. Note various methods for keeping meat and other cooked foods warm (these methods are very important where gas is used):
 - In warming oven
 - On asbestos mat, placed over simmerer
 - Over hot water, as in a double boiler
 - Etc.

Sautéed Tripe

Method:

1. Cut boiled tripe in pieces 2" square.
2. Rub pieces on both sides with salt, cayenne pepper, butter, and fine cracker crumbs.
3. Sauté them in fat until they are brown on both sides; butter is often used for the sake of its flavor.
4. Serve with an onion cream sauce, or with slices of onion steamed and seasoned with butter and salt.
5. Garnish with strips of pimento.

Note:

Raw tripe is sold in two forms:

- Fresh (such as that used in tripe rolls, *Food Economy*, page 118)
- Pickled, that is, soaked in vinegar

SAUTÉED FAT MEATS

A camp breakfast

	Farina or corn meal with chopped figs	
Sautéed ham		Boiled potatoes
Toast		Coffee

Sautéed Meat in Which Fat Predominates

This method (often termed pan-broiling) is used for fat bacon, ham, salt pork, etc.

Method:

1. Remove rind, and slice meat very thin.
2. Turning it often, cook the meat in a hot sautéing pan until it is transparent and crisp and is beginning to brown on the edges. Just as soon as fat flows from meat, pour it off into a cup; otherwise the fat may scorch and the meat thus become flavored with burned fat. Do not allow any meat, fat or lean, to stand in hot fat.
3. Garnish with parsley, celery tips, or curled celery, and serve while it is hot.

Notes:

1. The following is often a more desirable method for cooking fat meat:
 - a. Lay the meat on a fine rack (such as an oyster broiler) set in a dripping pan.
 - b. Cook the meat in a hot oven until it is transparent and crisp; turn meat when it is done on one side.
2. Avoid an extremely high temperature with either of the methods for cooking fat meat. Note objections to too high a temperature:
 - a. The fibers in the lean part of the meat may be toughened.
 - b. Irritating substances may be formed (such irritants may be formed when bacon fat is heated to 350° F., or 176° C.).

If any of the following contingencies arise during the cooking of fat meat, they usually are signals that the temperature is too high:

- a. Burned fat is visible in pan.
 - b. A volume of smoke fills the kitchen.
 - c. The fat in the pan bursts into flames.
3. Note advantages of the oven method:
 - a. Temperature is lower; hence irritating substances are not so likely to be formed.
 - b. Because the meat is on a rack it does not stand in hot fat; therefore there is much less danger of its becoming impregnated with burned fat.
 4. Note two points in economy:
 - a. Avoid cooking fat meat too long even at a medium temperature, for practically all of the fat of the meat simmers out and is of no use except for the purposes discussed in *b*, below.
 - b. Use the fat poured from the pan for various purposes, such as the sautéing of potatoes and other foods and the making of gravies.

Note, however, that fat meat should be cooked long enough to soften any tough connective tissue present. Raw or rare fat meat is more difficult of mastication and of digestion than well-cooked fat meat.

5. In case lean meat predominates in bacon, ham, etc., follow the rules for broiling steak and other lean meats (see page 22).

Sautéed Bacon or Ham and Egg

Method:

1. Sauté the bacon or ham, then remove it to a hot platter.
2. Break an egg into a saucer and then slip it into the hot fat, being careful not to break the yolk. (Why use a saucer?)
3. Cook the egg over a low flame until it is as hard as desired, constantly dipping the fat over the egg until the white forms a thick film over the yolk; turn the egg, if desired. (Why avoid very hot fat?) Do not allow the egg to bubble or blister in cooking.
4. Remove the egg to the platter by means of a skimmer.

Notes:

1. An egg cooked in this way is incorrectly called a fried egg; an egg is really fried if the fat is deep enough ($\frac{1}{2}$ " or deeper) to cover it.
2. Keep the temperature of the fat low during either the sautéing or the frying of an egg; the temperature of hot fat is very high and tends to make the egg leathery. The tougher an egg, the longer time it takes to be digested.
3. Melted butter is a delicate and desirable fat in which to sauté eggs; cover the pan and cook over a very low flame so as not to scorch the butter.

Sautéed Fat Pork with Gravy

Ingredients:

1 thin slice, 1½" square	Thin slices of salt pork, bacon, or ham, sautéed until brown and crisp
	Gravy:
½ t.	2 tb. pork drippings
1 t.	1-2 tb. flour
2 tb.	1 c. milk or water

Method:

1. Prepare gravy as follows:
 - a. Add flour to fat, and brown the mixture.
 - b. Add liquid gradually and stir over fire until gravy is creamy.
2. Cut the sautéed meat into small pieces, or leave in slices.
3. Cook the meat 3-5 min. in the gravy, then serve on toast.

Notes:

1. If they are very salty, it is desirable to soak any of these meats (salt pork, bacon, or ham) $\frac{1}{2}$ hr. or longer in cold water before sautéing them; or place the meats in cold water and bring to the boiling point. Dry the meats before sautéing them.
2. If preferred, roll the slices of fat meat in flour or corn meal, then sauté in fat.

MEATS: TENDER LEAN CUTS¹

BROILED LEAN MEATS

Dinner

Beefsteak
Peas

Apple tapioca

Baked potatoes
Bread and butter

GENERAL METHOD FOR BROILING

This method applies to either of the types of broiling: broiling by direct heat (use of a grill, or rack) and pan-broiling. It is used with meat balls and fish, as well as with the cuts of meat listed in step 1.

1. Cut off excess fat and all jagged edges from any of the following lean tender cuts of meat:

Chops
Ham, lean
Liver

Steaks (beef, veal, etc.)
Pork tenderloin
Etc.

2. Clean steaks, etc., by wiping them with a damp cloth. As a rule, do not wash them. (Why?)

3. Sear meat on both sides with intense heat; this process requires a few seconds only. The results of this initial high temperature are as follows:

- a. Flavor is developed. (Compare the flavor of broiled steak with that of boiled or steamed steak. Define extractives.)
- b. Juices are retained. (The meat is seared in order that it may cook in its own juices; thus the meat is really cooked by moist heat.)

4. Cook at a slightly lower temperature for the remainder of time, and turn meat often. At a certain point in the cooking the meat is puffy and juicy, but if cooked beyond this point it becomes hard, flat, and unpalatable.

5. Place meat on a hot platter and add salt, pepper, and butter.

6. If a platter gravy is desired, make it as follows:

- a. Pour fat from pan, and set it aside for sautéing purposes.
- b. Add a little boiling water to the pan and stir well so as to dissolve all the juices; if necessary, boil 2-3 min.

7. Garnish with any of the following:

Slices of lemon
Sprigs of parsley
Finely ground parsley

Cress
Celery tips
Etc.

¹ Both tough and tender cuts of meat are of high caloric value, but since the tough cuts are discussed in detail in *Food Economy*, the tender cuts only are considered in this book.

Notes:

1. Roasting is the cooking of larger pieces of meat and follows the same rule as to an initial high temperature followed by a lower temperature.

2. A fork is perhaps the best "grill" for use by each pupil.

3. Avoid many fork holes in meat during cooking; otherwise the juice escapes.

4. Meat should never stand in hot fat. Observe the following points:

Pan-broiling: As fat flows from steaks, etc., it should be poured off into a jar.

Grill-broiling: The rack elevates the meat from the drippings in the pan.

Hence, because of the rack, grill-broiling is a better method than pan-broiling, where the sautéing pan is used.

Note disadvantages arising from allowing chops, steaks, etc., to stand in hot fat:

a. The fat is likely to scorch, and so the meat may become impregnated with unwholesome products of burned fat which may irritate the digestive organs.

b. Fat reaches a very high temperature and toughens the meat proteins.

5. In order that a crust which will prevent the escape of juices may be formed, fish, chops, cutlets, etc., are often rolled in egg, then in corn meal, crumbs, or other starchy material. A roast is dredged with flour for the same reason.

Both veal and pork, to be wholesome, require especially thorough cooking. Grill- and pan-broiling are good methods with both these meats, but many cooks prefer to bread veal chops or steaks and then sauté, bake, or fry them. See the following recipe.

Breaded Veal Chops or Cutlets

Method:

1. Wipe meat with a damp cloth, then sprinkle with salt and pepper.

2. Dip meat first in crumbs, then in raw egg (a slightly beaten egg to which 1-2 tb. water has been added), and lastly in crumbs again.

3. Cook until meat is tender and well done, using any one of the following methods:

Sauté: Cover meat during the latter part of the cooking and reduce the temperature.

Bake: Sauté meat until it is brown, then add a little water or milk, cover, and bake until meat is tender.

Fry: Cook meat 4-6 min. in deep fat; the fat should be sufficiently hot to brown a cube of bread in 60 sec. For frying, meat may be dipped in batter instead of egg and crumbs, if preferred.

Notes:

1. Why is frying usually considered the least desirable method of cooking meat or any other protein food?

2. Cutlets are the round steaks of the veal animal. Chops are incorrectly called cutlets.

3. Veal is deficient in flavor, but is popular because of its delicacy of taste. It is necessary to supply flavor to veal by such additions as the following:

Crumbs for browning the surface of meat (see breaded veal)

Pork (especially good)

Vegetables:

Spinach

Almost any young vegetable, such as carrots

Sauces:

Tomato sauce

Brown sauce

Mild horse-radish sauce (made by using liquid from bottled horse-radish in place of milk in white sauce)

Flemish sauce (a brown sauce with a meat-stock basis and the addition of horse-radish, parsley, pickles, and carrots)

MEAT EXPERIMENT: COOKING OF TENDER OR SEMI-TENDER CUTS¹

Prepare five small pieces of equal size of raw round steak. Cook as follows, then compare as to toughness, retention of juices, etc.

PROCESS	OBSERVATION AND INFERENCE
PRINCIPLES OF ROASTING	
Prepare a miniature roast as follows:	
a. Dredge one of the five pieces with salt, pepper, and flour.....
b. Place it in a muffin pan and sear in a hot oven.....
c. Add 1 t. water and $\frac{1}{2}$ t. fat, cover with a small pie tin, and bake until meat is tender. Baste often. (Give reason.).....
d. Place meat on platter.....
e. Place pan over flame and make a gravy by adding a paste composed of $\frac{1}{4}$ t. flour and 1 t. cold water. Stir 2 min. over a direct flame.....
PRINCIPLES OF BROILING	
1. Hold a piece of meat near the gas or red-hot coals for 2 min., turning it often.....
2. Hold a second piece near the flame for 2 min. without turning it.....
3. Hold a third piece near the flame for a few seconds only, turning it twice. Remove it 2-3 inches from flame and cook 2 min. longer, turning it often.....
4. Pan-broil a fourth piece, using a high temperature at first and then a low, the same as in the preceding step.....

Notes:

1. Prepare the roast first, as it requires the longer period of time for cooking.

Each of the five pieces need be no larger than a $\frac{3}{4}$ "-1" cube, although, except from the standpoint of cost, a larger size is desirable; shears are useful in cutting the meat.

¹ If the school appropriation is sufficiently large, this experiment should be supplemented by a demonstration of the cooking of a family roast and steak.

The meat from this experiment may be utilized later in stew, if desired.

A good way to measure a minute of time is to count 60 rather slowly.

2. Which of the steak methods are correct? Which are incorrect? Why? What general rule as to temperature may be given for all protein foods?

3. What are the main objects in the cooking of tender meats? in the cooking of tough meats?

4. Note the important principle in cooking that high temperature is necessary for the development of high flavor. Thus we submit steaks and roasts to a high temperature in the very beginning. Why only in the beginning?

5. The tender or semi-tender cuts are those which, as a rule, do not require the addition of water in cooking.

OVEN-ROASTED MEATS AND POULTRY

Dinner

Roast of beef

Franconia potatoes

Raspberry sherbet

Yorkshire pudding

Succotash

GENERAL METHOD FOR OVEN-ROASTED, OR BAKED, MEAT

1. Wipe any of the following meats with a damp cloth (make an exception of poultry or game by washing it in water):

Beef cuts, such as:

Ribs, standing

Ribs, boned and rolled

Loin

Mutton, lamb, pork, and veal cuts

Poultry and game (for specific directions, see pages 30-33)

Do not cut off any fat.

2. Rub or dredge meat with salt and pepper.

3. Dredge it with flour (the flour becomes sticky and catches the juice which the salt tends to extract).

4. Place meat on a rack in a dripping pan with the fat portion of the roast uppermost (so that basting will be automatic; see Note 4). If the meat is very lean, fasten a piece of kidney suet or meat trimmings to the top surface; it is essential that this be done.

5. Place roast in a very hot oven, 482° F., or 250° C., for 15-20 min.; do not cover roast. Expose as much as possible of the cut surface of the meat to this searing process.

6. Reduce the temperature to 347° F., or 175° C., and keep this temperature for the remainder of time; keep the pan covered tight. (See Note 4.)

7. Place roast on a hot platter, remove string and skewers, and garnish with any of the following:

Parsley

Cress

Croquettes

Yorkshire pudding

Franconia potatoes

Vegetable timbales

8. Make a gravy.

Notes:

A loss of flavor and nutriment results if bones are removed before meat is cooked.

2. Salt and flour are not added to steaks before they are broiled. Neither is it necessary to add salt and flour to roasts before they are cooked (see steps 2 and 3). However, if the salt (and the accompanying flour) is added in the beginning rather than at the end of cooking, a roast is doubtless better seasoned, especially if it is a large one.

3. The rack is essential, for meat is toughened by standing in hot fat.

4. Basting of meat is essential in order that the juices may not evaporate and the meat thus be made tough. *Moist heat* is the secret of good cooking of all meats, tough or tender. The surface of a roast must be kept smeared with hot fat.

Note two important points to be remembered in regard to basting (see step 4):

a. Basting should be automatic. The cook should see that plenty of fat is placed on top of the roast before it is put into the oven. This fat melts and is kept flowing over the entire roast for the full time of roasting. No basting with the spoon is necessary if the pan is kept covered tight. Fat renders spoon basting unnecessary. With the ideal roast, no water is added to the pan.

b. Spoon basting is necessary under any of the following conditions:

if no fat is placed on the roast in the beginning;

if pan is not covered all the time;

if fat is all collected in the bottom of the pan.

If spoon basting must be done, use melted fat with the addition of only a very small quantity of water. A small roast requires more frequent basting than a large one because there is less juice in the small one and more surface, in proportion, for evaporation of juice.

5. "The roasting of meat is best accomplished by first searing over the meat at a high temperature and thereby retaining the juices. Also, the rich brown of meat which gives so desirable a flavor is not obtained below 249° C. [480° F.]. After this brown coating is obtained, however, the temperature is reduced, as high heat continued for any considerable length of time toughens the protein of the meat and causes it to become dry. The old-time method of determining the length of time for a roast to cook, by allowing so many minutes to the pound, is not exact because the shape of roasts varies. A small chemical thermometer inserted in the roast does, however, tell exactly the condition of the meat and makes it possible to have a roast of any size or shape exactly as desired."¹

For thermometer tests for the center of a roast, see "Table of Temperatures," page 8. The *average* inner temperature for the cooking of all roasts is 149°–150° F., or 65° C. All red color is gone when the roast is well done.

The old-time method is to allow 15–30 min. to each pound of meat, depending upon the shape of the cut and whether rare, medium, or well-done meat is desired.

6. Some authorities give 374°–383° F., or 190°–195° C., rather than 347° F., or 175° C., as the desirable temperature for the oven. But Sprague and Grindley² have found that the meats are as *quickly* cooked at 175° C. as at 195° C., and that less fuel is required.

Sprague and Grindley state also "that the lower the temperature of cooking, the more uniform is the condition of the interior of the meat."³

¹*University of Illinois Bulletin*, "Fats and Oils in Cookery. Cooking Temperatures," by Williams and Gray, page 19.

²*University of Illinois Bulletin*, "A Precise Method of Roasting Beef," by Sprague and Grindley, page 37.

³*Ibid.*

7. Note two good methods for class work:

- a. Each group of girls prepares a roll-roast from a loin or rib chop of mutton or lamb. Bake each roll in an individual oven in a 6" cake tin covered with a second 6" cake tin. Allow one skewer, cut in halves by the butcher, for each chop. Bake Yorkshire pudding in the same pan, if desired, also a Franconia potato. Make gravy the last thing.
- b. Cut a very thick steak into cubes. Each pupil bakes one cube in a covered muffin pan (see experiment on page 24). If the class period is very short, transfer the meat and potatoes to a sautéing pan just before the end of the hour and cook them until they are tender and brown.

A rolled chop is excellent for a broiling lesson as well as for a roasting lesson.

8. The method for baked fish is very similar to that for baked, or roasted, meat.

9. Potatoes, carrots, celery, and other vegetables may be added to the meat or fish baking pan; note the following recipe for potatoes.

Franconia Potatoes**Method:**

1. Pare white or sweet potatoes, parboil 10 min. in water to cover, then drain.
2. Bake 45 min., or until they are tender and brown, in the pan in which meat is roasting; baste often with fat and juice found in the bottom of the pan.

Note:

If Franconia potatoes are basted with fat and juice from the roasting pan, they may be baked in a pan other than the roasting pan.

Gravy**Ingredients:**

1-2 tb. meat fat and juice left in the roasting pan (see Note 1)

1 c. hot water or milk

Thickening paste:

1-2½ tb. flour

1-2½ tb. tepid or cold water (see Note 2)

Seasonings to taste (salt, pepper, etc.)

Method:

1. Add the hot water or milk to the fat and juice in the roasting pan and boil the mixture 2-3 min.
2. Add the flour paste, and stir 3-5 min. over fire, or until gravy is smooth and thick.
3. Season, and strain if necessary.

Notes:

1. Any fat left in the roasting pan, except the small quantity required for the gravy, should be poured into a jar and be kept for sautéing purposes.

2. Tepid water has a slight advantage over cold water in the mixing of the paste in that it blends more quickly with the flour.

3. Another good method for gravy is as follows:

- a. Add dry flour to the fat and juice in the roasting pan and stir over fire until mixture is brown.
- b. Slowly add the hot water or milk and stir until gravy is creamy.
- c. Season, and strain if necessary.

4. The following methods may be used singly or in any combination for securing a brown color in gravy:

- a. Brown flour by itself.
- b. Brown flour with the meat fat and juice (see Note 3).
- c. Add extract of beef (for flavoring effect; see Note 5).
- d. Add caramel.

5. Do not make more than 2 c. gravy from the escaped juices of a 4-lb. roast (unless extract of beef is added), else the gravy will be poor in flavor.

6. After pan-broiling of steaks, chops, etc., a little platter gravy is often made by dissolving the juices left in the pan in a little boiling water. Is platter gravy ever made from roasts?

Yorkshire Pudding

(A light batter similar to popovers)

Ingredients:

1 tb.	1 c. bread flour
dash	1 t. salt
1 tb.	2 c. milk
½ tb.	3 eggs, beaten light

Method:

1. Add the dry to the wet ingredients, and beat until mixture is smooth.

2. About 45 min. before a roast of beef is done, pour the batter into the grease in the bottom of the roasting pan (the roast is on a rack, and so does not touch the pudding).

3. Bake the pudding and the roast 45 min., having the oven very hot until the pudding "pops" or puffs, then medium for the remainder of the time. (Compare with the baking of popovers, page 185; study steam expansion.)

4. Cut pudding in squares and serve with the roast beef.

Notes:

1. Very little, if any, gravy for potatoes, etc., is available when the pudding is cooked in this manner.

2. The pudding may be baked in either of the following ways:

- a. Bake in hissing-hot gem pans (iron ones are good). Place gem pans on a pie tin so as to protect oven from grease, and baste pudding often with drippings from roasting pan.
- b. Cover bottom of any hot pan with melted fat from roast of beef, and add pudding mixture to ½" thickness; baste the pudding with drippings from the roasting pan.

3. Roast beef with Yorkshire pudding is especially popular among the English.

GENERAL METHOD FOR POULTRY

The following directions for dressing, stuffing, trussing, roasting, and carving a chicken also apply to all other poultry and birds, such as:

Duck
Goose
Turkey
Quail
Squab

To Dress a Chicken**Method:**

1. Remove feathers and pin-feathers after immersing the chicken for a minute in boiling water.
2. Singe in the following manner: Holding bird by the head and feet, suspend it over flames of gas, burning paper, or alcohol. Expose all sides to the flames, being careful not to smoke the bird.
3. Remove head and feet, then wipe the body with a damp cloth.
4. Cut skin down the back of neck, then turn skin back over the breast and remove crop and windpipe. Cut off neck where it joins the body, but do not remove the skin.
5. Make a small incision lengthwise from vent under the tail. Insert fingers as far into the opening as possible, and loosen membrane which lies close to the body. Loosen the membrane at the neck end in the same manner.
6. Reaching in with the fingers as far as possible, take hold of the gizzard, and draw it out gently from the tail end; with the gizzard will come all the internal organs except the lungs and kidneys.
7. Remove lungs and kidneys. (Lungs are imbedded in the ribs, and kidneys lie close to the backbone. The lungs are sometimes left in the chicken, but this is a questionable practice, as they are often infected.)
8. Being very careful, cut gall bladder from right side of liver. Remove any green portion from liver.
9. Prepare the giblets (heart, liver, and gizzard) by removing all membranes, arteries, veins, and blood.
10. Remove oil bag from above tail by cutting out a small, wedgelike piece crosswise of the tail.
11. Wash the chicken inside and out in several changes of cold water.

Note:

Tendons are sometimes removed as follows:

- a. Break each leg at the first joint.
- b. Twist leg until the tendons are exposed, then loosen the tendons with a fork or skewer and pull them out with the fingers; pull toward the foot, using a skewer as a lever.
- c. Remove foot with tendons attached to it.

To Stuff a Chicken

Method:

1. Wash a dressed chicken inside and out, and dry it.
2. Fill the cavity from vent to neck with stuffing. A mixture of the following ingredients is sufficient for a 3-lb. chicken:
 - 2 c. stale bread (measured after being cut into $\frac{1}{4}$ " cubes or broken into coarse crumbs)
 - $\frac{1}{4}$ c. butter or a substitute (such as chicken or goose fat), melted
 - 1-2 t. chopped onion
 - $\frac{1}{8}$ t. each of summer savory, thyme, sage, and sweet marjoram
 - Salt and pepper to taste
3. Sew up the incision near vent by means of the shoe-lacing stitch.

Notes:

1. If the stuffing is exceedingly dry, add a very little cold water, but note that the secret of successful stuffing is sufficient fat and little or no water:

Crumbs + fat = a tender stuffing

Crumbs + water = a tough stuffing

The more fat and the less water used, the less economical is the stuffing.

Do not mash the bread crumbs; a coarse, semi-dry stuffing is desirable, not a soggy one.

Note possible additions:

Egg (one), well beaten

Mashed chestnuts

Sautéed sausage

Raw apple, chopped (good with duck)

Raw oysters (omit the herbs and onion if oysters are used)

Chopped mushrooms (canned)

Chopped parsley

Black currants or raisins

Black or English walnuts, chopped (good with turkey)

If stuffing for fish is desired, omit the herbs and add capers and chopped pickles.

2. A potato stuffing also is good with duck, goose, or fish; mash potatoes and season highly with onion, sage, etc. A rice stuffing is sometimes used.

To Truss a Chicken

Method:

1. Draw thighs close to the body. Draw legs close to the tail and tie at the ends.
2. Insert a skewer into the fleshy part of first joint, and pass it through the body under the end of the breastbone and out through the corresponding part of the leg on the other side.
3. Turn skin of neck down smooth on the back. Press wings close to the body. Fold pinions across the back in such a way as to hold down the skin of the neck.
4. Pass a skewer through the wing, back, and out through the other wing.

Notes:

1. As a rule this method cannot be used with goose, inasmuch as two of the three wing joints are usually removed and cooked with the giblets, and the remaining joint is not strong enough to hold a skewer.

2. For excellent photographs of a trussed fowl, see Carlotta C. Greer, *A Text-Book of Cooking*, page 281.

To Roast (Bake) a Chicken**Method:**

1. Place a stuffed and trussed chicken on its back in a dripping pan and rub the entire surface with salt.

2. Sear 10 min. in a hot oven, then reduce heat, and baste. Continue basting every 10 min. until chicken is done, using the following mixture:

$\frac{1}{4}$ c. butter

$\frac{3}{4}$ c. boiling water

Turn chicken frequently in order that it may brown evenly.

Caution: Do not cover the pan at any time, since the secret of fine flavor in the chicken is thorough ventilation.

Notes:

1. This method (rules as to temperature, etc.) for chicken, turkey, etc., differs in the following particulars from the method for roasting beef and other meats:

Pan is not covered.

Basting is essential.

2. When the breast meat is tender, the bird is done. A 4-lb. chicken requires about $1\frac{1}{2}$ hr.

3. Strips of bacon or thin sheets of fat salt pork are often laid over chicken, or butter is rubbed on before the chicken is put into the oven to roast.

4. The neck and the giblets may be roasted with the chicken, or they may be stewed by themselves and then used in making the gravy.

To Carve a Cooked Chicken**Method:**

1. Place the chicken on the table with the neck to the left of the carver (so that the stuffing can be removed easily from the right).

2. Thrust the carving fork into the breast directly through the breastbone. (The fork is not removed until the carving is completed.)

3. Cut off the wings.

4. Cut off the legs, and disjoint each into drumstick and second joint.

5. Cut off the wishbone, with its meat, from the breast.

6. From each side of the chicken cut off the flat side bone (shoulder blade), beside which lies the wishbone. Put point of knife under one end of the side bone, then, using the knife as a lever, cut out the rest of the bone.

7. Cut down through ribs on each side (slanting cut), then *break* the breast from the back.
8. Cut breast in lengthwise halves, if desired, holding the knife parallel to the breastbone. The breast may be prepared in thin slices cut crosswise of the grain.
9. Using force with the knife, cut the back in halves crosswise.

Notes:

1. No mention of the neck is made, since a properly dressed chicken has no neck. (In carving a chicken from which the neck has not been removed, it is optional whether the neck is left attached to the back.)
2. The removal of the flat side bone is the most difficult cut in the carving process. The bone is about $3\frac{1}{2}$ " long and 2" wide, and has very little meat on it.
3. In some cases it is desirable to separate each wing at the middle joint.
4. As a rule, 10-12 pieces of chicken result from the carving process.
5. A general rule in carving a chicken is to follow the joints.
6. A raw chicken (for frying, stewing, etc.) is carved in exactly the same way as a cooked chicken; note, however, that a cleaver is often useful in steps 8 and 9, inasmuch as it requires more effort to carve a raw than a cooked chicken.

BOILED AND SIMMERED MEATS

Dinner

Boiled leg of lamb
Stewed tomatoes

French fried potatoes
Bread and butter

Orange custard

Boiled Meat

Method:

1. Wipe a tender cut of meat, such as leg of lamb, with a damp cloth.
2. Plunge the meat into boiling water barely deep enough to cover the meat, and boil it 1-3 hr., or until the meat is tender. Do not allow the water to boil so violently that the meat is ruptured. Add salt when the meat is about half cooked.

Note:

A leg of lamb weighs 8-12 lb.; allow 15-20 min. boiling to every pound.

Simmered Meat¹

Method:

1. Wipe a tough or semi-tough cut of meat with a damp cloth.
2. Plunge the meat into boiling water barely deep enough to cover the meat, and boil 5-10 min. (see Notes 1 and 2).
3. Reduce temperature to 176°-185° F., or 80°-85° C., and keep it at this simmering point 2-8 hr., or until meat is tender. Add salt when the meat is about half cooked. (The small gas flame called the simmerer will be useful, as will also a perforated cover with a thermometer inserted to extend into the water.)

Notes:

1. The meat is boiled 5-10 min. partly for the reason that high temperature develops the flavor of meat (high temperature develops the flavor of foods in general), and also to form an outer coating of coagulated protein, the purpose of which is to help retain the juices.

2. One of the chief objects in this recipe is the retention within the meat of as much of the juice as possible; therefore whenever the meat is to be served cold, allow it to cool in the broth.

As regards loss of nutritive juices, the initial temperature of water makes very little difference; meat may be placed in either hot or cold water at the start.² "Grindley has shown that when meat is cooked in water at 80°-85° C. [176°-185° F.], it matters little

¹ This recipe is placed in this book for reasons of comparison with the recipe for boiled meat. It rightfully belongs with the work on tough meats, *Food Economy*, pages 105-140.

² *Bulletin 141*, Office of Experiment Stations, U.S. Department of Agriculture, "Losses in Cooking Meat," by Grindley and Mojonnier.

whether it be first placed in hot or cold water, thus shattering a widespread belief that it is essential to plunge it at once into boiling water if we desire to prevent the escape of its nutritive juices."¹

Note the following summary regarding loss of juices. Apply these principles to meat stews, soups, etc., as well as to simmered meat.

- a. The initial temperature of the water has very little effect upon the quantity of juice lost.
- b. The smaller the pieces of meat, the more juice will escape from the meat.
- c. The fatter the meat, the less the loss of juice.
- d. The longer the period of cooking, the greater the loss of juice.

3. Since the water in which the meat has been cooked contains considerable flavoring and some nutritive material, it should be utilized in making soups and sauces.

4. Serve simmered beef with horse-radish sauce.

ACCOMPANIMENTS OF MEAT AND FISH

Pupil to specify in the following table the various sauces, vegetables, and relishes especially suitable for serving with various meats and fish. Include uses of the following sauces, many of which are white-sauce derivatives:

Brown gravy	Maitre d'hôtel butter
Brown mushroom	Mint
Caper	Onion (such as Soubise)
Cucumber	Sour-sweet
Currant-jelly	Tomato
Drawn butter	White
Egg	Etc.

Specify cuts of meat and method of cooking, if desired.

Study standard cookbooks, such as *Practical Cooking and Serving* by Hill.

MEAT	SAUCE	VEGETABLE	RELISH (Such as jelly, pickle, etc.)
Lamb.....
Mutton.....
Veal.....
Beef.....
Pork.....
Chicken.....
Duck.....
Goose.....
Fish.....
Lobster.....

¹ Bryce, *Modern Theories of Diet*, page 275.

FLOUR MIXTURES

INTRODUCTION

CLASSIFICATION

This classification is made on the basis of the proportions of flour and wetting used in flour mixtures. As a rule, the given ratios, 1:1, 2:1, etc., are simply approximate; that is, the proportions in most of the flour mixtures listed are a little over or under these ratios.

I. Batters (baked, sautéed, fried, steamed):

1. Thin batters, 1:1 (equal parts of flour and wetting):

Fritters (some kinds)
Griddlecakes
Popovers
Waffles
Etc.

2. Thick, or drop, batters, 2:1 (twice as much flour as wetting):

Cakes (most)
Fritters (some kinds)
Muffins
Patties, green-corn
Puddings (certain baked and steamed ones)
Breads:
 Certain steamed breads (such as Boston brown)
 Certain baked breads (such as graham)
Bread sponge (a batter containing yeast)
Etc.

II. Doughs (baked or fried):

1. Soft doughs, 3:1 (three times as much flour as wetting):

Most cookies	Some steamed puddings
Most biscuits	Brioche
Most breads	Strudel
Some cakes	Etc.

2. Stiff doughs, 4:1 (four times as much flour as wetting):

Biscuits, beaten	Gingersnaps
Breads (some)	Pie crust
Crackers	Puff paste
Flour pastes (noodles, etc.)	Etc.

Notes:

1. The following facts are helpful guides for the housekeeper:

Thin batters pour easily and in a stream.

Thick batters drop from the spoon.

Soft doughs are of good consistency for kneading.

Stiff doughs are not very easily kneaded. They are easily rolled thin.

Batters are not stiff enough to handle; doughs are stiff enough to handle and to knead on a board.

2. Batters and doughs are mixtures of flour and wetting, usually combined with other ingredients, such as sugar, salt, etc. Any fat present is always considered part of the wetting. Note the following summary as to average proportions of flour and wetting in batters and doughs:

FLOUR MIXTURE	FLOUR	WETTING
Thin, or pour, batter.....	1 c.	1 c.
Thick, or drop, batter.....	2 c.	1 c.
Soft dough.....	3 c.	1 c.
Stiff dough.....	4 c.	1 c.

Class experiment:

PROCESS	RESULT
a. Mix 1 t. flour and 1 t. water	Thin batter
b. Add 1 t. flour to a	Thick batter
c. Add 1 t. flour to b	Soft dough
d. Add 1 t. flour to c	Stiff dough

The proportions given for muffins, biscuits, etc. (see classification, page 36), are only a working guide and always should be adjusted according to the judgment and experience of the cook. In no recipe for a flour mixture can the quantity of flour required be fixed. For the following reasons, no *exact* rule can be given for the proportion of flour and wetting in any one flour mixture:

- a. The various flours (wheat, etc.) vary in their gluten-content and in their ability to absorb water.
- b. No two brands of bread flour (nor brands of any other flour) are the same; that is, they vary in their ability to absorb water.

Reduce the quantity of wetting when substituting pastry flour for bread flour in any given recipe, and vice versa; explain. (Pastry and bread flours may be used interchangeably in all recipes. An average rule is to allow $1\frac{1}{8}$ c. pastry flour to 1 c. bread flour.) Study *Food Economy*, pages 165-170, for use of substitutes for wheat flours.

3. Measure flour for flour mixtures after the first sifting; this rule applies to quantity of flour mentioned in all standard cookbooks. Dip flour lightly into a cup by spoonfuls; do not pack by scooping with the cup or by shaking the cup; aim to *keep* the flour light. In measuring a fraction of a cup, level flour with a spoon, do not shake it. (This rule also applies to certain other dry ingredients which pack easily, such as powdered and confectioners' sugar.)

4. Gluten (as well as egg) is a toughening agent in a flour mixture. As a general rule, the more any batter or dough is beaten or kneaded, the tougher it becomes, because the gluten is made tough and elastic; such toughening of the gluten is of more or less disadvantage, depending upon which of the three following groups the flour mixture belongs to (the last two groups contain no yeast):

Yeast mixtures: Kneading is of no disadvantage.

Mixtures containing much fat and sugar, such as rich cakes: Beating is of no great disadvantage. (Fat makes flour mixtures tender, as does sugar also, to some extent.)

Mixtures containing little fat and sugar: Beating is of great disadvantage except in the case of popovers. Such mixtures include:

Plain cakes
Muffins
Baking-powder or soda biscuits
Pancakes
Fritters
Etc.

Hence delicacy of texture in flour mixtures is dependent on quick and little mixing after the flour is in. As a rule, beat as long as desired before the flour is in. Avoid much beating of plain cakes, muffins, etc., after combining the dry and wet ingredients; beat just long enough to make the ingredients stick together. Speed of manipulation is of less importance where flours of low gluten-content are used. Pupil to name several such flours.

Note that kneading is of *advantage* in yeast mixtures in that it improves the grain.

5. Methods of blending or combining flour mixtures (pupil to supply data for the second column):

METHOD	FLOUR MIXTURES WITH WHICH USED
Beating, or whipping (this incloses much air).....
Stirring, or circular motion (this mixes ingredients well)..
Chopping.....
Cutting and folding (this prevents air already inclosed from escaping).....
Kneading.....
Pounding.....

By which of the methods does a bread- or cake-mixer blend ingredients?

6. Note three possible methods for adding meal (corn, barley, oat, etc.) to quick breads, yeast breads, and all other flour mixtures:

- a. Cook the meal to a mush with the liquid, allowing 5-20 min. in a double boiler, or 5 min. boiling if water, not milk, is used as the liquid. This is the best method, since it affords the most thorough cooking of the starch.

- b. Scald and soak the meal by covering it with scalding-hot liquid (such as skim milk) and allowing it to cool slowly over a period of about $\frac{1}{2}$ hr.
- c. Add dry meal to the other dry ingredients. This is the quickest, but on the whole the least desirable, method.

Method *b* is the best for adding rolled oats to a mixture, although either of the other two methods is sometimes used.

7. In nearly all, if not all, flour mixtures the following are possible substitutes for fresh milk, being especially useful in camp life and in cases of emergency:

Condensed milk
Powdered milk
Water

Sour milk and baking soda are possible substitutes for sweet milk and baking powder in almost any flour mixture. *But if no eggs are present in sour-milk and soda mixtures, 1 t. baking powder should be added for each cup of flour used.* Baking powder is sometimes added even if eggs are present; for example, 1 t. baking powder to each teaspoon of soda is used in griddlecakes.

It is often asserted that griddlecakes, muffins, and other quick breads made with sour milk are lighter and tenderer than those made with sweet milk. Such an assertion is undoubtedly true in the case of corn-meal mixtures.

Buttermilk may be substituted for sour milk, and, as a rule, in equal quantities, if the acidity and thickness of the two milks are about the same.

8. Yolks and whites of eggs may be added to flour mixtures in any of the following ways (pupil to state examples of the use of these methods):

METHOD	FLOUR MIXTURES IN WHICH USED
Together, unbeaten
Together, beaten.....
Separately, unbeaten.....
Separately, beaten (whites stiff).....

Include sponge cake, fruit cake, pound cake, etc., in the right-hand column.

The more eggs are beaten, the lighter is the flour mixture, but the more quickly it becomes stale; and vice versa. (Baking powder also causes mixtures to dry out quickly, hence one authority states that, as time goes on, she uses smaller and smaller quantities of baking powder in flour mixtures in general. The baking powder in many cookbook recipes can be reduced without having soggy result.)

9. Eggs may be substituted for part of the milk or water in the preparation of biscuit dough and other flour mixtures, but note that such a substitution necessitates the following changes in the recipe:

- a. Deduct $\frac{1}{4}$ - $\frac{1}{2}$ t. baking powder for every egg used as a substitute for milk or water, depending on the extent to which the egg is beaten.
- b. Decrease the flour by about 2 tb. for every egg (beaten or unbeaten) used as a substitute for milk or water.

10. "Fat" in a flour mixture means butter or a substitute. Each of the following is the equivalent in fat content of 16 tb. (1 c.) butter:

- 13 tb. lard substitute
- 14 tb. lard
- 14 tb. cottonseed oil
- $\frac{1}{2}$ c. butter, 6 tb. lard or lard substitute
- $14\frac{1}{2}$ tb. hardened vegetable fat (such as Crisco)
- 16 tb. (1 c.) of any one of the following:
 - Beef and mutton fat
 - Chicken fat
 - Goose fat
 - Commercial fat compound
 - Oleomargarine
- $13\frac{1}{2}$ squares bitter chocolate
- 2 c. and 5 tb. chopped suet

Since average butter is only 85 per cent fat, while Crisco, oils, and lard are 100 per cent, less of these is required than of butter. In other words, fats containing any of the following are used in smaller quantities:

- Water
- Buttermilk
- Solid substitutes (such as curd, salt, or connective tissue)

Pupil to decide which fats require the addition of salt to the flour mixture.

11. For sweetening foods in general (flour mixtures, etc.), any one of the following is approximately equal in sweetness to 1 c. granulated sugar:

- $1\frac{3}{4}$ c. corn sirup
- 1 c. honey
- $1\frac{1}{2}$ c. molasses

12. State reasons why butter is not a desirable fat for greasing tins.

13. The following rules apply to the baking of flour mixtures as well as to all other baking:

- a. Mixtures that should rise in the baking, such as muffins, cakes, etc.:
Bake on the lower shelf, at least until mixtures are very light and almost done. If necessary, remove mixtures at the last to the top shelf so as to brown the top surfaces.
- b. Mixtures that should not rise in the baking, at least to any extent, such as crackers, cookies, and most pies:
Bake on either the lower or the top shelf.
Any pies likely to have a soaked under crust, such as custard and juicy-fruit pies, should first be placed on the lower shelf (to harden lower crust), then later be placed on the upper shelf.

Note that foods brown better on the bottom if placed on the lower shelf, and that they brown better on the top if placed on the top shelf. Why? Are there any ovens which are exceptions to this rule?

14. The following are desirable points in an oven:

- a. Plain finish (so as to make easy cleaning possible)
- b. Glass door
- c. Thermometer
- d. Power to hold an even temperature (insist on this point when buying an oven)

15. Simple scheme for an oven thermometer:

- a. By means of a bit, bore a $\frac{1}{3}$ "- $\frac{1}{2}$ " hole in any oven, whether portable or in a range. Make the hole in the center of the top of oven, if possible, otherwise in the side. (In school, it is an easy matter to borrow from the manual training department a bit with which the teacher or pupil may bore holes in the portable ovens.)
- b. Wind string around and around a thermometer at a point about 5" from the bulb, and then at this 5" point fit the thermometer tight into a cork (not rubber).
- c. Rest the cork over the hole in oven (under some conditions, it may be better to insert the cork in the hole).

(For candy-making, stewing, etc., bore a hole in the cover of a utensil, then insert a thermometer in the same way as into the oven.)

FLOUR MIXTURES: BATTERS

BREAKFAST RECIPES

The first recipes given (griddlecakes and waffles) are thin, or pour, batters; the other three recipes (green-corn patties, muffins, and corn bread) are thick, or drop, batters. The so-called muffin method is used in mixing all of them (see Method II for muffins, page 46).

Sweet-Milk Griddlecakes and Waffles

Ingredients:

2 tb.	2 c. bread flour
$\frac{1}{4}$ t.	3 t. baking powder
dash	$\frac{3}{4}$ t. salt
$1\frac{1}{2}$ tb.	$1\frac{1}{2}$ c. milk
$\frac{1}{2}$ t.	2 yolks of eggs, beaten very light
1 tb.	2 whites of eggs, beaten stiff
$\frac{3}{8}$ t.	2 tb. fat, melted and somewhat cooled

Sour-Milk Griddlecakes and Waffles

Ingredients:

2 tb.	2 c. bread flour
$\frac{1}{16}$ t.	1 t. soda (avoid lumps)
dash	$\frac{3}{4}$ t. salt
2 tb.	2 c. thick sour milk or buttermilk (see Note 7, page 39)
$\frac{1}{2}$ t.	2 yolks of eggs, beaten very light
1 tb.	2 whites of eggs, beaten stiff
$\frac{3}{8}$ t.	2 tb. fat, melted and somewhat cooled

Method for griddlecakes and waffles:

1. Mix and sift the dry ingredients.
2. Gradually add dry ingredients to a mixture of the egg yolks and milk, mix only enough to make a smooth batter, then add fat.
3. Fold in the whites of eggs, and bake at once, as follows:

Griddlecakes: Drop mixture by spoonfuls on either a hot, lightly greased iron griddle or a hot, ungreased soapstone griddle. (Compare cakes baked in the two ways as to tenderness, color, and flavor.)

Waffles: Fill each compartment of a hot, lightly greased waffle iron two-thirds full of batter. (Use an excess of fat on the iron for the first set of waffles baked, and be certain that both sections of the iron are very hot; otherwise the waffles will stick to the iron.)

It is often convenient to pour the batter from a pitcher.

Use any of the following for greasing the iron griddle or the waffle iron:

Bacon or ham ends
Salt pork
Lard or Crisco
Etc.

Bake both griddlecakes and waffles until they are very light, and brown them on both sides, avoiding too high a flame, else the cakes will brown on the under side before they are light. With griddlecakes, look underneath for brown color by lifting the side of each cake with a spatula.

Do not turn either a griddlecake or a waffle until the following tests hold true:

- a. Edge of cake is cooked. (Note that all of the top surface except the edge is still semi-liquid when the cake is turned; do not allow the top to become hard and dry.)
 - b. Top surface is covered with bubbles. (Turn the cake before many of the bubbles on top break, else the cake will be heavy. Why? Discuss the source of these bubbles.)
4. Serve at once with any of the following (see Note 10):
- Butter (alone, or with powdered sugar or hot or cold sirup)
Stewed apples, fruit butter, or preserved fruit
Bacon
Gravy

Notes:

1. Use this method with all kinds of griddlecakes and waffles.
2. The yolks and whites of eggs may be beaten together; however, it is often asserted that the secret of fine, light griddlecakes and waffles consists in beating the yolks and whites of eggs separately.
3. While baking, keep the bowl of batter away from the stove. Why?
4. Note reasons why it is essential that very little fat be used on the iron griddle or waffle iron:
 - a. Irritating vapors may result from heating fat to the high temperature necessary in using either iron utensil; the more fat used, the more such substances may be formed.
 - b. Air is made smoky. There should be little, if any, smoke in the kitchen during the baking of griddlecakes or waffles if the proper (very small) quantity of fat is used on the griddle; only enough fat to keep the batter from sticking should be used.
 - c. Surface of griddlecakes and waffles is toughened.

For baking each of the class recipes for griddlecakes, pages 42 and 45, $\frac{1}{8}$ – $\frac{1}{4}$ t. fat is sufficient for the individual sautéing pan used as a griddle. Each class recipe given on page 42 makes one griddlecake or one waffle.

A soapstone griddle is good in that it needs no greasing, and cakes do not stick or burn easily. Do not wash a soapstone griddle; clean it with salt.

5. If the school owns no waffle iron, one or two pupils may be asked to bring irons from home.

6. In camp, cook griddlecakes either on a griddle or in a sautéing pan.

7. Add a small quantity of sugar to the batter, if desired; sugar is a browning agent in any flour mixture.

8. If desired, vary the batter for plain griddlecakes or waffles in either of the following ways:

- a. Substitute one or a combination of the following for part or all of the white wheat flour:

DRY FLOURS, ETC.

Barley flour
Bran
Buckwheat flour
Corn flour or meal
Crumbs, fine sifted bread
Graham flour
Rye flour
Wholewheat flour
Etc.

MOIST MATERIALS (STARCHY)

Cereal, cooked (hominy, rice, etc.)
Crumbs, soft bread
Macaroni or spaghetti, cooked, chopped fine
Potatoes, grated raw
Potatoes, mashed (white or sweet)
Etc.

Delicious cakes result from the substitution of corn flour (not meal) for all the wheat flour.

Corn meal or barley flour is said to make the batter brown especially well. Cakes containing raw potato require very thorough cooking. A coarse cooked cereal, such as hominy, should be mashed before being used.

Study rules for substitutes for wheat flours in flour mixtures in general in *Food Economy*, pages 165-170.

- b. Add the last thing $\frac{1}{8}$ -1 c. of any of the following foods to every cup of plain batter:

Fruit:

Berries (huckleberries, etc.)
Chopped raw apples
Chopped bananas
Chopped dried fruit (dates, etc.)

Juicy vegetables:

Stewed corn or celery
Mashed turnip or squash
Etc.

Instructor to assign to each pupil one of the substitutes or additions, then let the class compare all the cakes and waffles made. Pupil to study recipes in various cook-books.

9. Baking-powder griddlecakes of all kinds are useful in camp life. The commercial pancake flours, especially useful in camp cooking, usually consist of a mixture of part or all of the following ingredients:

Flour (almost any type)
Salt
Baking powder
Powdered milk
Egg substitute (a powder)

Pupil to make inquiry as to the composition of "Aunt Jemima's" and other flours.

10. A good sirup for use on griddlecakes and waffles is made by boiling together 5 min. a mixture of 1 c. brown sugar and $\frac{1}{2}$ c. water.

A simple shortcake is made by placing a fruit filling between two griddlecakes.

A jelly roll is made by spreading a thin griddlecake with jelly, rolling it, and sprinkling it with powdered sugar.

11. Why are soggy, or heavy, cakes indigestible?

12. Thin batters derived from plain griddlecake or waffle batter are as follows:

Popovers (use a little thinner batter than for griddlecakes or waffles; see page 185)

Fritters (see page 95)

Corn-Meal Griddlecakes

Ingredients:

1½ tb.	1 c. corn meal
2 t.	½ c. bread flour
½ t.	1⅓ tb. baking powder
¼ t.	½ t. soda
dash	½ t. salt
2 tb.	1½ c. thick sour milk or buttermilk
1 t.	1 egg, beaten very light (yolk and white together)
¼ t.	1 tb. fat, melted and cooled

Method:

Follow the method given on pages 42-43.

Green-Corn Patties, or "Oysters"

Ingredients:

(1 dozen patties)

½ tb.	¼ c. bread flour
⅛ t.	1 t. sugar
⅛ t.	1 t. baking powder
dash	¼ t. salt
¾ t.	2 tb. milk
½ t.	1 yolk of egg, beaten light yellow
1 tb.	½ c. sweet corn, drained well
1 t.	1 white of egg, beaten stiff

Method:

1. Mix dry ingredients, add them to the milk and yolk, and mix well.
2. Add grated or finely chopped corn; avoid whole kernels.
3. Fold in the whites, and cook the thick batter resulting in any one of the three following ways:
 - a. Grease a moderately hot griddle or sautéing pan, drop the batter by the tablespoonful, and brown on both sides, using a pancake-turner for turning. Thorough cooking is essential.
 - b. Drop by the tablespoonful into deep fat, and brown.
 - c. Drop the batter by the tablespoonful into a greased pan, and brown on both sides in an oven.
4. Serve with sirup, jelly, or thickened fruit juice as a breakfast or supper dish.

Notes:

1. The yolks and whites of eggs may be beaten together (see Note 8, page 39).
2. Chopped sweet green pepper is a good addition.
3. If the mixture is sautéed by the teaspoonful rather than the tablespoonful, $\frac{1}{8}$ c. soft stale bread crumbs may be substituted for $\frac{1}{4}$ c. flour in the given recipe; such patties are very tender and break easily.
4. Green peas (cooked and mashed) or another vegetable may be substituted for corn in the recipe.

One-Egg Muffins**Ingredients:***(8-12 muffins)*

4 tb.	2 c. bread flour.
$\frac{1}{2}$ t.	4 t. baking powder
$\frac{1}{16}$ t.	$\frac{1}{2}$ t. salt
4 t.	1 c. milk or water
$1\frac{1}{2}$ t.	1 egg, beaten very light
$\frac{1}{2}$ tb.	2-4 tb. fat

Method I:

1. Sift the dry ingredients together two or three times.
2. Chop in the cold fat with a fork until fat is in very fine particles.
3. Mix egg and milk together.
4. Add dry ingredients to wet ingredients and with little mixing make into a batter.
5. Place in greased muffin tins and bake 18-20 min. in a hot oven, 419°-428° F., or 215°-220° C.

Method II:

1. Sift dry ingredients together two or three times.
2. Mix the milk with the egg.
3. Add the dry ingredients to the egg and milk all at once, and with as little mixing as possible make into a smooth batter.
4. With little mixing, add fat, melted and cooled.
5. Bake as in Method I.

Notes:

1. Method II is generally used with muffins, and in the preparation of other flour mixtures it is often referred to as the "muffin method."

The following (simpler, but less usual) is a possible variation of Method II:

- a. Mix all the wet ingredients together, namely:

Milk

Egg

Melted fat (cooled slightly)

- b. Add the dry to the wet ingredients, and proceed as in the regular Method II. Do not allow the fat to be hardened into grains by using milk that is too cold, else the texture of the muffin will be injured.

2. The secret of tenderness and fine texture in muffins consists in little mixing. (See Note 4, page 38.)

Experiment as follows in order to study the effect of mixing upon the texture of muffins:

- a. Mix dry ingredients with wet ingredients and beat hard.
- b. Mix dry ingredients with wet ingredients and beat little.
- c. Bake mixtures resulting from a and b and compare results.

3. It saves time in dish-washing if the dry ingredients are added to the wet ingredients, rather than the wet to the dry ingredients. Why? However, one expert cook asserts that with plain mixtures like muffins it is better to add the wet to the dry ingredients, since less beating is required with this method (hence the gluten is not developed to such an extent).

4. Tests when muffins are done are the same as those for cake, namely:

Shrinkage from pan
Firmness to touch
Brown surfaces

5. A perfect muffin, like a perfect cake, is flat on top. (Muffins, cakes, and other flour mixtures in which the gluten has been developed by too much beating contain tunnels, or long holes, and are smooth and shiny on top and rise to a peak when baked.)

6. The recipe for one-egg muffins allows of considerable variation according to taste; for example:

Fat: Use 1-4 tb.

Sugar: Add 1-3 tb. (sugar aids in browning, adds to the tenderness, and removes any flatness of flavor).

Egg: Omit the egg, using $\frac{1}{4}$ c. milk, or a little less, in its place. In most cases, beat the eggs for use in muffins; beat the yolks and whites separately or together.

Flour: See Notes 7 and 8.

Nuts, etc.: To each cup of batter add the last thing $\frac{1}{8}$ - $\frac{3}{4}$ c. of any of the following (use extra eggs or baking powder in every case, else the muffins will be heavy):

Nuts, chopped

Corn, stewed

Fruit, raw or cooked, such as:

Chopped raw apples

Dried fruit (currants, raisins, chopped dates, figs, prunes, or apricots, etc.)

Various berries (huckleberries, etc.)

The additions (nuts, corn, and fruit) may be made no matter what kind of flour has been used in the muffins.

Class to experiment with muffins, using varying quantities of the following:

Fat

Sugar

Egg

Leaven (for example, make one muffin without any baking powder, simply by way of comparison)

Pupil to prepare a recipe for sour-milk muffins.

7. Any of the wheat flours (bread, pastry, whole-wheat, or graham) may be used for muffins. Any one of the following suggestions may be adopted in the given recipe for one-egg muffins:

- a. Substitute 2 c. pastry flour for 2 c. bread flour, keeping all the other ingredients the same except for the reduction of the milk or water to $\frac{3}{4}$ c. (Reduce to 1 tb. milk or water in the class recipe.) (Muffins are a little more delicate in texture if made with pastry flour.)
- b. Substitute 2 c. whole-wheat flour for 2 c. bread flour.
- c. Substitute graham flour for half of the bread flour, that is, use 1 c. of each.

8. Any of the substitutes for wheat flours, such as soft bread crumbs and cooked cereal (rice, hominy, oatmeal, etc.), may also be used; see rules for substitution, *Food Economy*, pages 165-170. Either of the following changes may be made in the given recipe for one-egg muffins:

- a. Use 1 c. rye flour and 1 c. bread flour.
- b. Use $\frac{3}{4}$ c. corn meal and $1\frac{1}{4}$ c. bread flour.

Note two reasons for using but a small quantity of corn meal:

- a. Corn meal in a larger quantity would absorb too much of the wetting; corn meal absorbs more wetting than does bread flour.
- b. Corn meal tends to make the muffins heavy and granular.

9. Some kinds of muffin batter are good fried by the spoonful in deep fat, particularly that made with rye or graham flour (see page 93).

Sour-Milk Corn Bread

Ingredients:

$\frac{1}{4}$ c.	2 c. corn meal, yellow or white
$\frac{1}{4}$ c.	2 c. sour milk
$\frac{1}{4}$ tb.	2 tb. sugar, white or brown
$\frac{3}{16}$ t.	$1\frac{1}{2}$ t. salt
$\frac{1}{4}$ tb.	2 tb. fat, melted and cooled
1 tb.	2 eggs, well beaten
$\frac{1}{8}$ t.	1 t. soda
$\frac{1}{8}$ t.	1 tb. cold water

Method:

1. Prepare a mush from the corn meal and milk by cooking them together in a double boiler for about 10 min.
2. Cool, and add all the other ingredients, including the soda dissolved in the cold water.
3. Pour batter into shallow, greased pans (or muffin pans), and bake about 30 min. in a moderate oven, 383° F., or 195° C.

Notes:

1. If preferred, use either of the following methods for mixing (see Note 6, page 38):
 - a. Mix and sift all the dry ingredients, then add them to a mixture of the wet ingredients. (Omit 1 tb. cold water in using this quick method.)
 - b. Scald milk, add the corn meal, then cool gradually over a period of $\frac{1}{2}$ hr. Add all the other ingredients.

2. Raw or cooked fruit (such as apple or berry) is a good addition to any corn bread or muffin. Cooked rice, hominy, or other cereal is also good in corn-meal breads.
3. What is the difference between old-process and new-process corn meal?

Sweet-Milk Corn Bread

Ingredients:

1½ tb.	¾ c. corn meal, yellow or white
2½ tb.	1¼ c. bread flour
1 t.	3 tb. sugar
¼ t.	½ t. salt
½ t.	4 t. baking powder
1½ tb.	1 c. milk
1½ t.	1 egg, beaten very light
¼ tb.	2 tb. butter or a substitute, melted and cooled

Method:

1. Mix and sift the first five (dry) ingredients, then add them to a mixture of the last three (wet) ingredients and beat well.
2. Pour batter into shallow, greased pans (or muffin pans), and bake 20–30 min. in a moderate oven, 383° F., or 195° C.

Note:

Either of the following methods for mixing may be used in place of the foregoing quick method:

- a. Prepare a mush from the meal and milk, allowing about 10 min. in a double boiler. Cool, and add all the other ingredients, including the dry ingredients sifted together. (The bread is softer than if made by the foregoing method.)
- b. Scald milk, then add the corn meal and cool very slowly. Add eggs, then stir in the flour, salt, and baking powder sifted together.

Southern Spoon Corn Bread

Ingredients:

(6 servings)

2 tb.	1 c. corn meal, yellow or white
¼ c.	2 c. cold water
1 tb.	2 eggs, well beaten
⅛ tb.	1 tb. fat, melted and cooled
¼ t.	2 t. salt
2 tb.	1 c. milk, whole or skim

Method:

1. Mix corn meal and water, bring it slowly to the boiling point, and cook 5 min.
2. Add all the other ingredients, beat well, pour batter into a well-greased pan, and bake 25 min. in a hot oven.
3. Serve with a spoon from the dish in which the corn bread is cooked; sirup or milk is a good accompaniment.

STEAMED SUET, OR PLUM, PUDDINGS

Steamed suet, or plum, puddings include the following types:

Blueberry
Cranberry
Currant
Date
Fig
Raisin
Etc.

All are good cold-weather desserts. Why? All are drop batters. The two following recipes are typical. Carrot pudding is inexpensive, and keeps for weeks the same as fruit cake. Note that suet puddings in general keep well.

Standard Suet Pudding

Ingredients:

1½ tb.	1½ c. bread flour
⅛ t.	½ t. soda
⅛ t.	¾ t. salt
¼ t. mixed spice	¼ t. ginger
	¼ t. nutmeg
	¼ t. allspice
	½ t. cinnamon
½ tb.	½ c. chopped kidney suet
½ tb.	½ c. milk
½ tb.	½ c. molasses
6 raisins	¾ c. raisins (omit, if preferred)
¼ t.	1 tb. flour (rub this on the fruit)

Carrot Pudding

Ingredients:

(6 or 7 servings)

1 tb.	1 c. bread flour
⅛ t.	½ t. soda
⅛ t.	½ t. salt
½ tb.	½ c. sugar
½ tb.	½ c. chopped kidney suet
½ tb.	½ c. grated raw carrot
½ tb.	½ c. grated raw potato
6 raisins	½ c. black raisins, chopped

GENERAL METHOD FOR STEAMED SUET PUDDINGS

1. Mix and sift the dry ingredients, then stir in the fruit, washed and thoroughly dried.
2. Mix the suet with the wet ingredients.
3. Add dry ingredients to the wet, and mix well.
4. Steam batter in greased molds, such as lard pails or baking-powder cans; 3 hr. are required for the average-sized mold. Fill the molds not more than three-quarters full.
5. Remove covers from the molds, and dry the puddings 10-15 min. in a moderate oven.
6. Serve with hard or other pudding sauce.

Notes:

1. The kidney fat of beef, veal, lamb, and pork (not mutton) may be used in these puddings. Beef fat, often called suet, is ordinarily used; always use kidney suet, since it contains much less tough membrane than other suet. Suet is a cheaper shortening than butter, and by many is considered more delicate. What is the price of kidney suet per pound?

Fat salt pork which has been soaked in cold water over night is a possible substitute for suet.

2. Dates, figs, currants, or nuts may be substituted for part or all of the raisins in the two recipes on page 50.

3. Dried and condensed milk, both so useful in camp cooking, may be used in these puddings.

4. Boil the pudding, if desired, using either of the following methods:

a. Place pudding in a mold, cover mold, drop it into a kettle of boiling water, and boil 3 hr.

b. Boil pudding as follows in a cloth:

(1) Wring a piece of strong muslin out of boiling water, and spread it over a bowl.

(2) Sprinkle it with a thick layer of flour, add pudding, and tie in a ball; tie bag loosely, especially if pudding contains much leaven.

(3) Flour the opening.

(4) Drop pudding into boiling water and keep water boiling 1-3 hr., depending on the size and the shape of mold.

5. Occasionally, but not often, a suet pudding is baked only.

6. It is suggested that class recipes for all these puddings be cooked by either of the following methods:

a. Steam pudding 25-30 min., then bake 5 min.

b. Place pudding in a covered baking-powder can, drop can directly into boiling water, and boil 25-30 min.; a narrow, deep saucepan, such as the top of a double boiler, is essential.

Use a sample baking-powder can as a mold in both methods *a* and *b*. (One teacher reports the receipt of twenty-five empty sample cans from a certain manufacturer of baking powder.)

CAKES CONTAINING FAT

CAKES IN GENERAL: A CLASSIFICATION

- I. *Cakes containing no fat* (namely sponge cakes, such as angel cakes and sponge cakes proper; see pages 189–193)
- II. *Cakes containing more or less of any of the following fats* (see Note 10, page 40):
 - Butter (expensive)
 - Butter substitutes:
 - Oleomargarine
 - Nut margarine
 - Crisco
 - Corn oil
 - Wesson oil
 - Drippings (bacon fat is said not to taste in spice cake)
 - Cream (sweet or sour)

The following are typical recipes for plain and rich cakes.

Plain Cake

Ingredients:

¼ tb.	¼ c. fat
1 tb.	1 c. sugar
1½ t.	2 medium eggs, well beaten (see Note 8, page 39)
1 tb.	1 c. milk
2½ tb.	2½ c. pastry flour
¼ t.	2½ t. baking powder
dash	¼ t. salt
4 d.	1½ t. vanilla

Method:

Mix ingredients by any one of the six methods given on pages 55–57, then bake cake 30 min. in a shallow pan in a moderate oven.

Note:

Derivatives of plain cake include the following:

Cottage pudding (plain cake batter placed in a shallow pan, baked 20–25 min. in a moderate oven, then cut in squares and served hot with lemon or other pudding sauce)

Steamed puddings containing fruit (such as blueberries or cranberries)

Concord pudding (a fruit cobbler made with cake batter, not biscuit dough; see page 74)

Cream, or Washington, pie

Rich Cake**Ingredients:**

$\frac{1}{2}$ tb.	1 c. fat
1 tb.	2 c. sugar
$1\frac{1}{2}$ t.	4 eggs
1 t.	$\frac{3}{4}$ c. milk
$1\frac{1}{2}$ tb.	3 c. pastry flour
$\frac{1}{8}$ t.	3-4 t. baking powder (see Note 1)
dash	$\frac{1}{4}$ t. salt
4 d.	1 t. vanilla

Method:

Mix ingredients by any one of the six methods given on pages 55-57.

Notes:

1. Use 3 t. baking powder if the yolks and whites of eggs are beaten together until very light; use 4 t. if the eggs are not beaten at all.
2. This recipe is often called standard, or cup cake, or 1, 2, 3, 4 cake. Explain the latter term.
3. A few of the numerous derivatives of either plain or rich cake are as follows:
 - Chocolate cake (such as devil's food)
 - Marble cake
 - Gold cake
 - White cake
 - Nut cake
 - Fruit cake (raisin, currant, etc.)
 - Spice cake

Devil's Food

(A derivative of the foregoing rich cake)

Ingredients:

$\frac{1}{2}$ tb.	$\frac{1}{2}$ c. fat
2 tb.	2 c. sugar
$\frac{1}{4}$ egg	4 eggs (see Note 1)
1 tb.	1 c. milk
$2\frac{1}{3}$ tb.	$2\frac{1}{3}$ c. pastry flour
$\frac{1}{4}$ t.	3-4 t. baking powder (see Note 1)
dash	$\frac{1}{4}$ t. salt (omit if a salted fat is used)
1 t.	2 squares bitter chocolate, melted
4 d.	$1\frac{1}{4}$ t. vanilla

Method:

1. Mix ingredients by any one of the six methods given on pages 55-57. The standard method is ordinarily used.
2. Pour batter into a large tube tin which has been greased and floured. (Note that the raw batter half fills such a tin.)
3. Bake cake 45-50 min. in a moderate oven.
4. Cover it with white or chocolate boiled frosting.

Notes:

1. Use only 3 t. baking powder if the yolks and whites of eggs are beaten separately (see Note 8, page 39). (If the standard cake method is used in this case, add well-beaten yolks to the creamed fat and sugar, and as the last step fold in the whites beaten stiff; add vanilla and cooled chocolate just before folding in the whites.) Use 4 t. baking powder if the yolks and whites are beaten together.

2. The class recipe is sufficient for one large muffin tin. Use $\frac{1}{4}$ yolk (about $\frac{3}{4}$ t. well-beaten yolk) and $\frac{1}{4}$ white (about $3\frac{1}{2}$ tb. white beaten stiff).

Pound Cake*(A rich cake)***Ingredients:**

1 tb.	1 c. butter or a substitute
4 t.	$1\frac{3}{4}$ c. granulated sugar
$2\frac{1}{3}$ t.	5 eggs, unbeaten
2 tb.	2 c. pastry flour
dash	$\frac{1}{2}$ t. salt
dash	$\frac{1}{2}$ t. mace

Method:

The standard cake method is given, since it probably insures the best results with pound cake.

1. Cream fat, then add sugar, and beat mixture until it is very light.

2. Add eggs one at a time, each time mixing thoroughly until the following points hold true:

a. Mixture is an "emulsion" that looks waxy and stiff like mayonnaise or beaten butter.

b. Mixture is so stiff that it drops by the very stiff spoonful.

Much beating with a spoon, fork, or other utensil is essential.

3. Add flour, salt, and spice sifted together once, and blend batter well by mixing hard for a few seconds only. Avoid much beating at this stage, else the cake will be tough and contain large air holes; a perfect pound cake contains only small air holes and is velvety in texture.

4. Place batter in a shallow tin that has been greased and floured.

5. Bake about 1 hr. in a steady, moderate oven or in the special oven described on page 57, Note 4, a. The cake is rich in eggs, therefore beware of scorching it. Allow 15–20 min. for the class recipe.

Notes:

1. Of what does the wetting in this recipe consist? Of what does the leaven consist? Note that a little milk and baking powder are used in some recipes for pound cake.

2. A pound cake will keep for months.

3. Experiment with a cake-mixer in step 2.

4. Small cakes for use at receptions, etc., are made as follows:

a. Bake pound cake in a $\frac{1}{2}$ "-1" sheet.

b. When it is cold, cut it into any of the following forms:

Crescents	Circles
Diamonds	Squares
Hearts	Etc.

c. Cover cakes with one of the following glazes, and let them stand over night:
1 white of egg mixed with 1 tb. powdered sugar

A heavy sirup, cooled slightly, made by boiling 1 c. sugar and 1 c. water to the threading stage

d. Dip cakes into melted fondant, white or tinted, by means of a fork or a candy dipper, then place them on paraffin paper. (See recipe for fondant, page 102. Melt the fondant in a double boiler until it is as thin as cream.)

e. Decorate the cakes, using, for example, dainty strips of angelica. (See outline, page 62.)

VARIOUS METHODS FOR CAKES CONTAINING FAT

In work with all six methods it is essential to remember that much beating after the flour is in tends to toughen cakes. This is especially true with plain cakes; it makes less difference with cakes rich in fat and sugar. The rule is of greater force with cakes made of bread flour than with those made of pastry flour. Why? See Note 4, page 38.

Miller and Allen make the following statement: "This series of experiments disproves the old theory which is still sometimes taught, that long and vigorous beating is necessary to obtain a good cake. We have frequently heard housewives say that whenever they took particular pains to make a fine cake, it was sure to be a failure. On the other hand, one that had been put together hurriedly was usually a success. There is an optimum amount of beating which gives the most desirable product, a cake with fine texture but free from tunnels. This seems to be from one to two minutes, depending upon the vigor with which the beating is done."¹

Creamed-Fat Method

(Standard cake method)

1. Cream, or beat, the fat with a spoon until it is white and creamy.
2. Add the sugar and beat the mixture until it is very light and foamy and the sugar is dissolved; this beating of the sugar and fat together is essential.
3. Add the yolks or the whole eggs (beaten or unbeaten), beat the mixture thoroughly, then add the flavoring.
4. Sift the flour, salt, and baking powder together.
5. Add milk and dry ingredients alternately to the mixture of fat, sugar, and eggs, and beat only until it is smooth.
6. At this point, if they are used at all, fold in the whites beaten until stiff.
7. Pour batter into pans, and bake.

¹"Problems in Cake Making," *Journal of Home Economics*, December, 1918, page 545.

Melted-Fat Method I

1. Beat together the yolks and whites of eggs.
2. Add the sugar and beat the mixture thoroughly.
3. Add the milk, then a sifted mixture of flour, baking powder, and salt, and beat mixture only until it is smooth.
4. Add melted fat, beat batter slightly, and bake.

Notes:

1. The fat should be (a) barely melted, not cooked, (b) warm, not hot. A low temperature is advisable for the melting process; hence note the value of a double boiler.
2. If preferred, beat the whites of eggs separately and fold them into the batter after beating in the fat.

Melted-Fat Method II

(Muffin or griddlecake method)

1. Mix and sift together the dry ingredients.
2. Mix all the wet ingredients except the melted fat, and beat them thoroughly.
3. Add the dry ingredients to the wet ingredients and beat mixture just until it is smooth.
4. Add the melted fat, beat mixture slightly, and bake.

Note:

This method is sometimes used for the quick mixing of layer cakes, and of cottage pudding and other plain cakes in which no great quantity of fat is used.

Chopped-Fat Method

(Biscuit or pie-crust method)

1. Mix and sift all the dry ingredients together, then chop in the fat by means of a fork or two knives.
2. Add the wetting, beat only until mixture is smooth, and bake.

Note:

A cake of rather coarse texture results from the use of this method.

Rubbed-Fat Method

1. Mix the flour and cold fat together with the hands until neither one can be distinguished.
2. Add the remaining dry ingredients and mix well.
3. Add the dry ingredients to the wet, beat only until batter is smooth, and bake.

Note:

A cake of fine texture results from the use of this method.

Softened-Fat Method

(Cake-mixer method)

1. Place all the ingredients together in a cake-mixer, including fat which has been softened a little and flour which has been thoroughly sifted with the leavening agent.

2. Turn the mixer just until the batter is smooth, that is, 1-3 min., then bake.

Notes:

1. For good results, the mixer must be at least half full of batter.

2. If the cook has a strong arm, she can use a spoon for beating all the ingredients together in a bowl.

3. In work with a class recipe, stir all the ingredients together in a bowl just until they are well blended.

Notes on the Foregoing Six Cake Methods

1. Experienced persons will find all methods satisfactory with nearly every cake made with fat, *provided the ingredients are thoroughly mixed*. Inexperienced persons should use the creamed-fat method, since it insures the thorough mixing so essential to good cake-making.

2. See Note 8, page 39, for possible methods for adding eggs to cakes and other flour mixtures.

3. The matter of economy in time is of great importance. Pupil to determine which of the six methods requires the least time.

4. Note the following points with regard to the baking of all cakes containing fat:

a. Employ a steady, moderate temperature of 360°-410° F., or 195°-210° C. (Insert a thermometer in the top or side of oven.) Some experienced cooks prefer the following method of baking to the use of the steady oven; it is satisfactory for pound cake as well as all other cakes containing fat:

(1) Place cake in a perfectly cold oven.

(2) Immediately light both burners, turning the gas on full.

(3) Employ a medium temperature as soon as the cake is well risen.

b. The following factors, to a certain extent, influence the temperature for baking cakes:

Size and shape of pan

Composition of cake with regard to quantity and kind of fat, leaven, fruit, eggs, chocolate, etc.

5. Pupil to study all cake-making data in the following books and articles: Bailey, *Domestic Science*; Chambers, *Principles of Food Preparation*; Forster and Weigley, *Foods and Sanitation*; Kinne and Cooley, *Foods and Household Management*; Mills, *Making Cake*, Parts I and II (Cornell Reading-Courses); Van Arsdale, *Technical Education Bulletin 22*, Teachers College, Columbia University, "Some Attempts to Standardize Oven Temperatures for Cookery Processes"; Wellman, "Cake Mixing," *Journal of Home Economics*, December, 1909; Miller and Allen, "Problems in Cake Making," *Journal of Home Economics*, December, 1918.

ECONOMICAL CAKES*(Prepared by special methods)***Apple-Sauce Cake****Ingredients:**

$\frac{1}{4}$ tb.	$\frac{1}{4}$ c. fat
1 tb.	1 c. brown sugar (no lumps)
1 tb.	1 c. cold, unsweetened sour-apple sauce in the form of a mush as thick as a drop batter
$\frac{1}{16}$ t.	1 t. soda
$\frac{1}{4}$ t.	1 tb. hot water
$\frac{1}{16}$ t.	1 t. nutmeg
$\frac{1}{16}$ t.	1 t. cinnamon
$\frac{1}{16}$ t.	1 t. baking powder
dash	$\frac{1}{2}$ t. salt
2 tb.	$1\frac{3}{4}$ -2 c. bread flour

Method:

1. Mix the cake by the creamed-fat method except for the addition of apple sauce where otherwise yolks of eggs would be added; before the apple sauce is added, it should be well blended with a solution of the soda and hot water. (What are the source and the kind of bubbles?) The cake mixture should be as stiff as a very soft drop biscuit dough.

2. Place batter in either a cake or a bread pan, and bake 40-50 min. in a slow oven; in some cases it is well to increase the heat a little at the very last.

Notes:

1. Because this fruit cake contains no eggs, it is especially desirable in the winter, when eggs are expensive. The class recipe is sufficient for one muffin tin.

2. If desired, add the following ingredients, chopped:

$\frac{1}{2}$ tb.	$\frac{1}{2}$ -1 c. raisins
1 t.	$\frac{1}{4}$ - $\frac{1}{2}$ c. walnut meats
$\frac{1}{4}$ t.	Citron to taste

Camp Fruit Cake**Method:**

1. Boil the following ingredients together 3 min., then cool:

1 tb.	1 c. sugar, white or brown
dash	$\frac{1}{4}$ t. salt
dash	$\frac{1}{4}$ t. grated nutmeg
$\frac{1}{16}$ t.	1 t. ground cinnamon
$\frac{1}{16}$ t.	1 t. ground cloves
$\frac{1}{2}$ tb.	$\frac{1}{2}$ c. lard or a substitute
1 tb.	1 c. water
6-8 raisins	1-2 c. raisins (or any other dried fruit), washed

2. Add the following when the foregoing ingredients are cold:

2 tb.	| Dry ingredients, sifted well together:	2 c. bread flour
$\frac{1}{32}$ t.		$\frac{1}{2}$ t. baking powder
$\frac{1}{16}$ t.		1 t. soda
1 t.		$\frac{1}{2}$ c. nut meats, chopped

3. Place batter in one bread pan and bake 1-1 $\frac{1}{4}$ hr. in a slow oven.

Mock Devil's Food

Ingredients:

2 t.	$\frac{1}{2}$ c. warm water
$\frac{3}{4}$ -1 t.	2 squares bitter chocolate, melted in a double boiler
$\frac{1}{16}$ t.	1 t. soda
$\frac{1}{2}$ t.	1 yolk of egg
2 t.	$\frac{1}{2}$ c. cold water
1 t.	4 tb. fat
1 $\frac{1}{3}$ tb.	1 c. sugar
4 d.	$\frac{1}{2}$ t. vanilla
4 tb.	1 $\frac{3}{4}$ c. pastry flour
dash	$\frac{1}{4}$ t. salt
$\frac{1}{16}$ t.	1 t. baking powder

Method:

1. Add warm water to melted chocolate and simmer to make a smooth paste as thick as a thick batter.

2. Mix the soda, yolk, and cold water.

3. Cream fat and sugar together.

4. Cool the chocolate paste, beat into it the fat and sugar mixture, then add the yolk mixture and vanilla, and mix well.

5. Add the flour, salt, and baking powder sifted together, and beat only until batter is smooth.

6. Bake 45-60 min. in a moderate oven until cake is very firm; thorough baking and drying out are essential.

7. Handle the cake with great care in removing it from the tin, since it is very tender and breaks easily.

Notes:

1. It is impossible to state the exact quantity of flour required, since the quantity depends on the thickness of the chocolate paste. The cake batter should drop by the stiff spoonful, that is, it should barely drop; if it is too stiff to drop, add a little water.

2. One white of egg is sufficient for a boiled frosting for this recipe.

3. The class recipe requires careful work, such as:

Level measurements of melted chocolate, etc.

Removal of excess chocolate from under part of spoon

Cooking of chocolate and water to a very thick paste

Boiled Frosting

Ingredients:

	Recipe I	Recipe II	Recipe III
Granulated sugar	1 c.	1 c.	1 c.
Water	$\frac{1}{2}$ c.	$\frac{1}{2}$ c.	$\frac{1}{2}$ c.
Cream of tartar	$\frac{1}{16}$ t.	$\frac{1}{16}$ t.	$\frac{1}{16}$ t.
White of egg	1 white	2 whites	$\frac{1}{6}$ c. whites

Method:

1. Beat the white of egg until it is stiff and so dry that the gloss is gone.
2. Mix the sugar, cream of tartar, and water together and stir them over the fire until the sugar is dissolved.
3. Heat without stirring to 238°–244° F., or 114.5°–117.5° C., according to the quantity of white of egg used. (See Note 1.) Wash any crystals from the sides of pan by means of a fork wound with wet cheesecloth.
4. Stirring the white constantly, add the hot sirup to it in a slow, steady stream; aim at even cooking of the white.
5. Beat mixture until it is white, thick, and creamy; a Dover beater is often used.

Notes:

1. "In making boiled frosting, . . . it is possible to vary the amounts of ingredients used in proportion to the time of cooking. There are three ingredients essential to the making of any so-called boiled frosting, water, sugar, and white of egg.

"Cream of tartar may be used with good effect, for it gives the frosting a creamy consistency, but if none is at hand the same effect may be produced by substituting vinegar or by increasing the amount of water and thus prolonging the time of cooking. When the amount of white of egg used in a recipe is increased, the temperature to which the sugar solution is cooked should be increased. . . .

"Recipe I is the old standard recipe and makes a rather dense, sweet frosting. The sugar solution should be cooked to 238° F., the soft ball stage. . . .

"Recipe II makes a fluffy frosting. The sugar solution should be cooked to a temperature of 244° F., the beginning of the hard ball stage, because of the increased amount of white of egg used. . . .

"Recipe III is the best recipe to use because it calls for the careful measurement of all ingredients, including the white of egg."¹

2. A good class recipe is as follows:

- 3 tb. sugar
- 2 tb. water
- 3 tb. beaten white (wire egg-beater used)
- 4 d. flavoring

Boil the sirup until a $\frac{1}{4}$ "– $\frac{1}{2}$ " "hair" can be pulled with the finger tip from the end of a spoon. One marshmallow is a possible addition to the completed sirup. Beat the sirup and white of egg together with a Dover beater.

¹The three sets of ingredients for boiled frosting, as well as Note 1, are taken from the Cornell Reading-Courses, *Making Cake*, Part II, by Katherine H. Mills.

3. Variations in ingredients for frosting:

- a. Any of the following ingredients, singly or in any combination, may be added to the frosting just before it is spread on the cake:

$\frac{1}{2}$ -1 t. flavoring extract

$\frac{1}{4}$ - $\frac{1}{2}$ c. shredded coconut

$\frac{1}{4}$ - $\frac{1}{2}$ c. chopped nuts or fruit, such as dates, cherries, figs, or raisins

1-2 squares of chocolate, melted in a double boiler. (Use 1 t. chocolate in the class recipe; see Note 2.)

Yolk of egg, beaten

- b. Marshmallows may be melted in the sirup just before it is added to the white of egg.

- c. The following are possible substitutes for part or all of the granulated sugar:

Brown sugar

Honey, strained

Maple sugar

Glucose (Karo corn sirup, etc.)

The more glucose used in making boiled frosting and candies, the lower the temperature to which the sirup should be brought; see pages 99-100. Boiled frosting (made with 1 white of egg to 1 c. sugar) and fondant are both cooked to the soft-ball stage.

- d. The following are possible substitutes for part or all of the water:

Strong coffee

Milk (often used with brown sugar)

Fruit juice

Etc.

4. If a thermometer is not available, use the following tests for the sirup:

- a. Two drops form on edge of spoon and then form into one drop.

- b. A silken and delicate thread is formed when the sirup drops from the tines of a fork. When 2 whites of eggs are to be used, the thread, or hair, should be about 2" long; if 1 white is to be used, it should be a little less than 2".

5. If the sirup for frosting (or fondant) is cooked too long, add a little water and reboil.

6. Variations in method for frosting:

- a. To secure a boiled frosting which hardens only on the outside and is creamy underneath:

(1) Before the sirup is quite done, add a little of it to the beaten white, and beat well.

(2) When the remainder of sirup is done, add it to (1).

- b. To secure a springy frosting, excellent for use with a pastry tube in ornamenting cakes:

(1) Prepare a boiled frosting.

(2) Beating constantly, cook frosting in a double boiler until it is fluffy.

See *Making Cake*, Part II, for three possible methods for boiled frosting, including detailed directions for *a* and *b* immediately preceding.

7. Larned says: "Cover warm cakes with cold frostings, and cold cakes with warm frostings."

8. In frosting small cakes, it is well to use Recipe II rather than Recipe I (see page 60), since Recipe II stiffens less quickly than Recipe I.

9. Variations in a frosted cake:

- a. After a white frosting has hardened somewhat, pour melted chocolate (bitter or sweet) over it to form a $\frac{1}{16}$ " layer.

- b. Use melted chocolate for initial and design work on a white-frosted cake.

- c. Sprinkle freshly grated coconut on a frosted cake.

White Mountain Cream¹**Ingredients:**

- 1 c. sugar
 $\frac{1}{3}$ c. boiling water } boiled to the threading stage
 1 white of egg, beaten stiff
 1 t. vanilla (or $\frac{1}{2}$ tb. lemon juice)

Method:

See general method for boiled frosting, page 60.

GARNISHES FOR DESSERTS (CAKES, PUDDINGS, ETC.)**I. Fruits:**

- Raw (strawberries, pomegranate seeds, etc.)
 Dried (dates, figs, etc.)
 Canned, preserved, or made into a compote
 Candied or crystallized, such as:
 Apricots
 Cherries
 Citron (sliced, grated, or cut in the shape of leaves, etc.)
 Orange or lemon peel (sliced or grated)
 Pineapple
 Glacéd (orange sections, white grapes, etc.)

II. Frostings (white or tinted), such as:

- Simple boiled
 Ornamental (see recipe in any standard cookbook)
 Fondant (small cakes are dipped in melted fondant)
 Butter (similar to hard sauce)

III. Nuts (whole, shaved, shredded, chopped, ground, or glacéd), such as:

- Almonds (see Note 6)
 Brazil nuts
 Coconut, dry shredded, browned in an oven; or fresh
 Pistachio nuts

IV. Miscellaneous garnishes:

- Angelica stalks (cut in the shape of leaves, stems, etc.)
 Candies (dainty and small)
 Candles (white or colored)
 Cream, whipped (tinted or not)
 Ginger root, candied or preserved
 Jellies, clear, made of fruit or gelatin (if very stiff, these may be made especially attractive by being forced through a ricer)
 Macaroons, ground
 Meringue
 Sauces, sweet
 Sugar, granulated (red, yellow, etc.)
 Sugar, powdered
 Violets, candied

¹Adapted from Farmer, *Boston Cooking-School Cook Book*, page 528.

Notes:

1. Many of the items listed are valued chiefly for their color. Pupil to specify which of the garnishes may be used as a source of each of the following:

Green

Red

Yellow

White

2. Pupil to check those items which are used, as a rule, on cakes only.

3. Pupil to supply data for the following table:

FOOD	SUITABLE GARNISHES
Plain cake
Fancy birthday cake
Ice cream
Rice pudding

4. A paper funnel (in preference to a cloth pastry bag) is desirable for decorating cakes with ornamental frosting, whipped cream, etc.; cut different tips for different purposes, and use one funnel for stems, one for leaves, etc.

A pastry bag is of much use in general cooking; for example, in making mints and other candies, cream puffs and éclairs, potato roses, etc.

5. The following points apply in a general way to the decoration of cakes and puddings, to the garnishing of salads, etc.

a. Design: Only the simplest of designs should be used. The decoration of any one dish should be according to one motive or central idea; a cake must be made a unit as to design or color. (Dainty line work is often effective; use long, hairlike strips of crystallized fruits, etc. Strips of angelica rolled in dainty pink and white candies make a very pretty cake decoration.)

b. Color: Delicate tints are usually permissible, but much color, such as red or green, is not in good taste. Green, especially, should be used sparingly.

c. All work in design and color offers opportunity for the following:

Instruction of the cooking class by the school art instructor

Display of originality on the part of the pupil

6. Note the simpler way to prepare ground almonds:

a. Blanch almonds, then cut them in medium-sized pieces.

b. Brown the nuts, and roll them into crumbs.

Ground almonds are sometimes prepared as follows:

a. Blanch the nuts, then soak them in cold water several hours.

b. Drain, cover with sugar, and roll them to a meal with a rolling pin.

c. Bake until golden brown.

FLOUR MIXTURES: DOUGHS

COOKIES

(Optional lesson)

Cookies are derived from cake batters containing fat.

Sweet-Milk Sugar Cookies

Ingredients:

½ tb.	½ c. fat
1 tb.	1 c. sugar
1 t.	1 egg, beaten well
½ tb.	½ c. milk (or water)
2 tb.	2 c. bread flour
⅛ t.	2 t. baking powder
dash	½ t. salt
to roll	Flour enough for a soft roll dough (1 c. or more)

Method:

1. Mix all ingredients except the last named by any of the cake methods given on pages 55-57, preferably the creamed-fat method.

2. Add sufficient flour to make a dough just stiff enough to roll, and roll it to ¼" thickness on a floured board. (Work with the mixture as soft as possible, since excess flour toughens.)

3. Cut with a cooky-cutter, sprinkle or not with granulated sugar, place cookies in floured or greased pans, and bake 8-15 min. in a moderate oven, 350°-400°F., or 176°-204°C.

Notes:

- Any of the following ingredients may be added:

Caraway seeds
Chocolate, melted
Nuts, chopped
Spice

Fruit:

Currants
Dates, chopped
Raisins, chopped

- If desired, brush the cookies with egg, or milk and egg, before sprinkling them with sugar. Ground almonds or other nuts may be substituted for sugar.

- Any cake recipe containing fat may be used for cookies if only one-third to one-half the quantity of milk called for is used.

Sour-Cream Sugar Cookies*(Of high caloric value)***Ingredients:**

1 t.	1½ c. fat
1 tb.	1 c. sugar
1 t.	1 egg, beaten well
½ tb.	½ c. thick sour cream
2 tb.	2 c. bread flour
½ t.	¾ t. soda
dash	½ t. salt
dash	½ t. cinnamon
to roll	Flour enough for a soft roll dough (½-1¼ c.)

Method:

Use the same method as for sweet-milk sugar cookies (sour cream takes the place of milk). Bake cookies in a moderate oven, not cooler than 380°-390°F., or 193°-198° C.

BAKING-POWDER BISCUITS AND THEIR DERIVATIVES

Roll Biscuits

Ingredients:

(Soft dough)

4 tb.	2 c. pastry flour
$\frac{1}{3}$ t.	4 t. baking powder
$\frac{1}{16}$ t.	$\frac{1}{2}$ t. salt
$1\frac{1}{2}$ t. (or 1 t.)	2-4 tb. butter or a substitute (see Notes 1 and 2)
2 t., or a little less	$\frac{3}{5}$ c. cold milk or water, or a mixture of the two

Method:

1. Sift the dry ingredients together several times.
2. Chop in the fat very thoroughly, using a fork or two knives. Avoid using the fingers. (Why?)
3. Add liquid, and with as little mixing as possible make into a dough; use a spatula, not a spoon, since the latter packs the dough.
4. Toss the dough upon a floured board, sprinkle it with flour, and gently pat or roll the dough to $\frac{1}{2}$ "-1" thickness. Avoid much flour. Keep dough as soft and spongy as can be patted into shape; it should be too sticky to take up with the hands.
5. Shape dough into small biscuits by means of a cutter dipped into flour.
6. Pack biscuits tightly together on a lightly floured pan (such as an iron sheet) and bake 12-20 min. in a hot oven, that is, about 437° F., or 225° C. A greased pan may be used, but is not so good.

Notes:

1. All the ingredients should be cold—ice-cold if possible. However, it has been proved that melted fat may be used in making baking-powder biscuits if due care is taken to beat it thoroughly into the dry ingredients. Experiments have shown that biscuits so made compare favorably both as to tenderness and as to texture with those made with cold solid fat.

2. If oil is used as the fat in baking-powder biscuits, make the following changes in the recipe:

a. Use less milk or water.

b. Mix the oil with the milk or water rather than with the dry ingredients.

3. Drop, or emergency, biscuits are made more quickly and are often a convenience in camp or other cooking. The ingredients are the same as for roll biscuits, except for the addition of a little extra milk or water; the drop dough should be spongy and just stiff enough to drop and to stand up with stiff projections. Use $2-2\frac{1}{4}$ t. liquid in the class recipe. The method is the same as for roll biscuits, except that the dough is dropped by the spoonful into greased muffin tins; dough should be rough on top.

4. It is sometimes asserted that biscuits are better if treated as follows:

- a. Mold biscuits and place them in a tin.
- b. Let biscuits stand 15 min. at room temperature before placing them in the oven.

Give a possible reason for this method.

5. Characteristics of good biscuits:

- Rough on the surface
- Fluffy, and so tender that they snap off easily
- Crumby

Characteristics of poor biscuits:

- Smooth on the surface
- Rubber-like
- In layers

Biscuit dough is never so tender if rolled out the second time; hence, in cutting, it is well to crowd up the dough with the biscuit cutter so that when the one cutting is finished no dough is left on the board. Draw dough under cutter by means of cutter.

6. Note possible variations in the ingredients for biscuits:

- a. Biscuits made with pastry flour are more delicate in texture than those made with bread flour. Excellent biscuits can be made from whole-wheat or graham flour. A great variety of biscuits can be made by the use of substitutes for wheat flour, such as:

Rye or barley flour (used in part)

Mashed potatoes (see recipe for potato biscuits, *Food Economy*, page 103)

(See *Food Economy*, pages 165-170, for the rules for wheat substitutes in flour mixtures in general.)

- b. In making roll or drop biscuits, use either a plain dough such as the given recipe, or use this dough made rich with one or more of the following:

- | | |
|-------|-----------------------------------------------------|
| Sugar | Extra fat, or shortening (see use in shortcake) |
| Egg | Dried fruit (dates, raisins, apricots, etc.) |
| Spice | Citron, candied orange peel, or crystallized ginger |
| Cocoa | Etc. |

Peanut butter or rich cheese, grated, may be used as part or all of the fat in making biscuits. Biscuit dough containing fruit is sometimes good baked in loaf rather than in biscuit form. Any of the following may be sprinkled on top of the biscuits (or scones) before baking:

- Cinnamon or other spice
- Granulated sugar
- Dried fruit (washed, dried, and rubbed with flour), such as:
 - Raisins, currants, or cherries
 - Citron or candied orange peel, chopped
 - Etc.

A single raisin, currant, cherry, or cube of citron or orange peel is often sufficient for the top of a biscuit or scone.

Either of the following glazes may be applied to biscuits shortly before they are removed from the oven:

- Milk
- Sugar and water (1-2 tb. sugar to 1 c. water)

- c. Good biscuits, often a source of economy, may be made by the substitution of thick sour milk and soda for the sweet milk and part of the baking powder of ordinary biscuits. Use $\frac{1}{2}$ t. soda to every cup of sour milk; in addition to the soda, use 1 t. baking powder to each cup of flour used.
7. The following derivatives of biscuit dough, as a rule, contain neither sugar nor fruit:
- | | |
|--------------------|-----------------|
| Dumplings for stew | Savory biscuits |
| Crust for meat pie | Scones |
| Nut bread | Cheese sticks |

The first three recipes listed in this note are usually derived from drop-biscuit dough, the others from roll dough; no set rule can be given regarding this point.

The following is an excellent method for savory biscuits:

- a. Roll biscuit dough to $\frac{1}{4}$ " thickness and spread with one or more of the following:
- | | |
|-------------------------------|-------------------------|
| Grated cheese | Peanut or almond butter |
| Chopped almonds or other nuts | Ground meat or fish |
- b. Roll dough like a jelly-roll, slice it in 1" pieces, stand each piece on end, and bake in a hot oven.

Savory biscuits may also be made by the use of cheese or other protein material placed between two or three flat layers of dough. Cut the whole mass with a biscuit-cutter.

Scones

Method:

- Roll biscuit dough to $\frac{1}{4}$ "- $\frac{1}{2}$ " thickness.
- Cut it into any of the following forms:

Circles	Triangles (such as 4")
Squares	Quarter circles or new moons
Diamonds	Etc.
- Cook in either of two ways:
 - Place scones in a greased and floured tin and bake 15-25 min. in a hot oven (see Note 1).
 - Cook scones 10 min. on a floured griddle, then turn and cook them 10 min. on the other side. Allow opportunity for rising by avoiding too high a temperature.

Notes:

- It is well to treat scones as follows before placing them in the oven:
 - Brush with any of the following glazes:
 - 1 tb. sugar dissolved in 4 tb. milk
 - Whole egg or white of egg slightly beaten
 - Melted butter, or a substitute
 - Sprinkle with sugar and cinnamon.
- If preferred, a drop batter, 2:1, may be made by the use of less flour in the biscuit recipe. Drop batter by the spoonful on a greased griddle and turn scones when they are brown and light.
- One large scone, enough for an entire family, may be made if desired.
- Genuine Scotch scones are made of fine oat flour and the same proportion of shortening as is used in pie crust; no leaven is used.

FRUIT DESSERTS; PUDDING SAUCES

Only those fruit desserts which have a foundation of biscuit or other dough are considered in this chapter. (Certain fruit desserts made with dough, such as fruit pies, are considered elsewhere.)

The following table contains a list of eight fruit desserts and the doughs commonly used in their preparation; each of the desserts contains sugar as well as dried or fresh fruit. (For a recipe for apple strudel, see pages 79-81.)

PLAIN BISCUIT DOUGH (SWEET- OR SOUR-MILK)	BISCUIT DOUGH (SWEET- OR SOUR-MILK) MADE RICH WITH ONE OR MORE OF THE FOLLOW- ING: EGGS, EXTRA FAT, SUGAR	PASTRY	YEAST-BREAD DOUGH
I. Pinwheel rolls II. Dutch apple cake III. Roly-poly (dumpling) IV. Cornucopias V. Pudding steamed in molds VI. Cobbler VII. Fungy (extra plain dough is used) VIII. Shortcake	Pinwheel rolls Dutch apple cake Roly-poly Cornucopias Pudding steamed in molds Cobbler Shortcake	Pinwheel rolls Dutch apple cake Roly-poly Cornucopias Cobbler Shortcake	Pinwheel rolls Dutch apple cake Roly-poly Cornucopias

Notes:

1. A plain cake batter (such as sponge cake) may also be used as the basis of cobbler or shortcake. Is it possible to use cooky or cracker dough in preparing cornucopias or any of the other eight recipes?

When biscuit dough is used, Nos. V, VI, and VII are usually made from drop dough, the others from roll dough; however, no set rule can be given concerning this point, inasmuch as shortcake and some of the other dishes can be prepared from either drop or roll dough. All eight desserts, as well as others made from biscuit dough, are usually simple in character, and therefore much more wholesome than pastry for children and adults.

2. Note the following recommendations for the class:

- a. Each pupil, by assignment, to make one or two of the desserts listed; in this way all eight can be prepared in the one lesson.
- b. Biscuit dough (class recipes as follows) to be used in making all the desserts:

In preparing desserts Nos. I, II, III, and IV, use the class recipe for roll-biscuit dough, page 66; in preparing Nos. V and VI, follow the class-recipe directions for drop-biscuit dough given in Note 3, page 66.

In making fungy and shortcake, use the class recipes given on page 75.

I. Pinwheel Rolls

Method:

1. Roll dough to $\frac{1}{4}$ "- $\frac{1}{2}$ " thickness (for possible doughs, see table, page 69).
2. Spread dough with a little melted fat, brown or white sugar, spice, and a choice of the following fruits, chopped in most cases:

Fresh fruit (huckleberries, etc.)

Stewed fruit or jams

Dried fruit, soaked until plump, such as:

Apricots

Citron

Currants

Dates

Raisins

Strawberries

3. Roll dough like a jelly roll, then cut in slices $\frac{3}{4}$ "-1" thick.
4. Turn each slice, or small roll, on end. Cones may be formed, if preferred, by squeezing one end of each roll to a point.
5. Bake rolls 10-15 min. in a hot oven. If desired, spread the rolls (tops only) with brown-sugar sirup shortly before they are done, then brown them well.

Notes:

1. Ground maple sugar may be substituted for the filling of fat, sugar, spice, and fruit called for in step 2.
2. Rolls may be baked in muffin rings or pans, if preferred.
3. If an unsweetened dough is used, grated cheese, ground peanuts, etc., may be substituted for fruits in this recipe.
4. Pinwheel rolls, sweet or savory, are generally used as a breadstuff. They are good with salad or afternoon tea. If a sauce is added to the sweet rolls, they may be used as a dessert for children, etc.

II. Dutch Apple Cake

Method:

1. Spread a drop dough to $\frac{1}{2}$ "-1" thickness in a shallow pan, or else roll a dough to the same thickness and then place it in the pan (for possible doughs, see table, page 69).
2. Pare tart apples, quarter and core them, and slice each quarter into halves lengthwise.
3. Arrange slices of apple in parallel rows on top of the dough, the sharp edges down.
4. Sprinkle apples with sugar, cinnamon, and lemon juice.
5. Bake cake in a hot oven 20-30 min., or until the apples are tender.
6. Serve with cream and sugar, or with lemon juice.

III. Roly-Poly

(A baked or steamed dumpling)

Method:

1. Make any one of the following types of rolls (for possible doughs to be used, see table on page 69):

a. Envelope roll:

- (1) Roll dough to $\frac{1}{4}$ " thickness, then cut it into 4"-8" squares.
- (2) Place filling (not too moist) in the center of each square.
- (3) Moisten the edges of each square with cold water and fold in the four corners until they meet in the center.
- (4) Press the edges together rather firmly.

b. Pocketbook roll:

- (1) Roll dough to $\frac{1}{4}$ " thickness.
- (2) Cut dough into rounds with a large floured cooky-cutter.
- (3) Spread one-half of each round with filling; then fold round in halves and press the edges together.

c. Crescent roll:

- (1) Prepare a pocketbook roll.
- (2) Pull the straight edge of the roll until a crescent is formed.

d. Jelly roll:

- (1) Roll dough into an oblong shape of $\frac{1}{4}$ "- $\frac{3}{4}$ " thickness, and spread with a thin layer of fruit. Add sugar and spice, if desired.
- (2) Roll like a jelly roll; do not roll tight.

2. Bake the roll in a moderate or hot oven until the crust is done and the fruit is tender; or place roll on a greased plate and steam it 25-30 min. or longer. The steaming process requires more time than baking. (Why?)

3. Serve with cream and sugar or a pudding sauce.

Notes:

1. Possible fruits (left-overs, etc.) for use as filling are as follows:

Fresh fruit, raw or stewed (such as sliced apples or peaches)

Canned fruit, or a very stiff jam or jelly

Dried fruit, stewed or simply soaked until plump, such as:

Dates

Figs (good cooked with sugar to a paste)

Raisins

Add sugar and spice, if desired. Avoid excess juice.

Pupil to bring jam or other fruit filling from home.

2. Individual dumplings are usually made, although one large dumpling may be made.

3. Strawberry snowball, a pretty form of dumpling, is made as follows:

a. Steam a spherical biscuit 20-30 min. (The biscuit may be baked, but it is not so white if cooked in this way.)

b. Serve with a sauce made by mixing equal quantities of hard sauce and crushed berries.

4. In steaming any fruit dumplings in class, make use of either of the following suggestions:

a. A number of pupils, collectively, to use a large steamer:

- (1) Place a buttered plate in the steamer, leaving a $\frac{1}{2}$ " margin for steam.
- (2) Place dumplings on plate.

b. Each pupil to use a small steamer:

- (1) Line a small sieve with a square of cheesecloth, and place a $\frac{1}{8}$ " layer of dry flour on the cloth.
- (2) Place a dumpling on flour.
- (3) Place sieve over a deep saucepan of boiling water, such as the top of a double boiler used by itself.
- (4) Cover tight, and steam dumpling 25-30 min. A piece of cheesecloth, slipped just beneath the cover, is sometimes of aid in preventing a soggy pudding. Why?
- (5) When dumpling is done, scrape off the flour on bottom; dumpling should not be at all soggy.

A tight cover is essential in either (a) or (b), for if steam is allowed to condense in or on dumplings (or any other steamed flour mixture) a soggy and indigestible product results.

5. Savory dumplings may be made from unsweetened dough by the use of meat, fish, cheese, or any other protein-food filling, well seasoned (see *Food Economy*, pages 99-100).

IV. Cornucopias (Cones)

Method:

1. Grease cornucopia molds made of stiff paper or of tin (see Note 1).
2. Stuff the molds with paper, except when they are made of very stiff paper or of tin.

3. Cover each mold with dough (for possible doughs, see table, page 69). Apply the dough in the following manner:

a. Roll dough to $\frac{1}{4}$ " thickness (possibly $\frac{1}{8}$ " in the case of pastry), then cut in $\frac{1}{2}$ "-1" strips.

b. Wind the strips around and around the mold, beginning at the tip. Use a little cold water to fasten the dough at the tip and where the strips join or overlap. (Overlapping is better, as a rule.)

4. Lay cornucopias on a greased pan, and bake them in a hot oven.
5. Remove any paper used as stuffing.
6. Serve the cornucopias hot or cold as a dessert, after filling them with any of the following:

Fresh fruit (strawberries, sliced oranges, etc.)
 Dried fruit (dates, figs, etc.)
 Stewed or canned fruit (cherries, peaches, etc.)
 Jam or jelly
 Whips (such as white-of-egg whip, page 195)
 Whipped cream, flavored
 Ice cream

Serve with or without pudding sauce.

Notes:

1. A class biscuit recipe with a basis of 4 tb. flour is sufficient to cover one mold made from a 4" square of paper. After rolling the paper to form the cone, twist the tip in such a way as to fasten it well; a little paste, applied in one spot only, will be found sufficient to hold the top of the cone in place.

2. If desired, make "complete" dishes by filling the cones with creamed chicken or other protein food (see *Food Economy*, page 64).

V. Pudding Steamed in Molds**Method:**

1. Cut or chop fruit in small pieces, using the following singly or in any combination:

Raw fresh fruit (apples, blueberries, cranberries, etc.)

Stewed dried fruits (figs, apricots, etc.)

Stewed fresh fruits

Raw dried fruits (dates, raisins, currants, etc.)

Add sugar and spice to the fruits, as desired. Stewed fruits, when used, should be cold.

2. Mix or fold fruit into the dough (for possible doughs, see table, page 69).

3. Fill greased baking-powder cans or other molds two-thirds full of dough.

4. Cook pudding in either of the following ways:

a. Place molds in a steamer and steam 20-60 min., the time depending chiefly upon the size of pudding.

b. Drop cans directly into boiling water and boil 20-60 min. The following are essential points regarding the cans:

Tight covers

Waterproof bottoms and sides

Cans to stand upright in the water, and the covers not to be submerged

5. If pudding appears at all moist, even though done, dry it 10-15 min. in the oven.

6. Serve with cream and sugar or hard or other pudding sauce.

Notes:

1. Because of the varying quantities of fruit juice, the wetting (water or milk) used in the dough must be a variable quantity. The pudding is soggy and indigestible if too much wetting is used; hence dried fruits, unstewed, are the safest fruits to use.

Note the following general rules for fruits:

a. A stiff dough should be used with a very soft fruit, and vice versa.

b. Avoid juice of fruits unless it is used as part of the regular wetting of dough.

2. If preferred, dough and fruit may be put into the can in alternate layers, with a possible total of two or three layers of fruit and two or three layers of dough.

3. Can the pudding be steamed if the dough is placed directly in the greased top of a double boiler?

4. The best way to cook this pudding in class is as follows:

- a. Place dough in a sample baking-powder can; the smaller the can, the more attractive the shape of the pudding when it is done.
- b. Drop can, tightly covered, directly into boiling water. Do not touch for 20-30 min. (No baking is necessary.)

VI. Cobbler

Method:

1. Butter a baking dish and cover the bottom of it with fruit properly sweetened; allow plenty of fruit juice, else the cobbler will burn. Select the fruits from the following list, remembering that acid fruits, such as cranberries or cherries, are especially desirable in this dessert:

Fresh fruit, raw:

Apples
Apricots
Cranberries
Huckleberries
Oranges
Peaches
Strawberries
Etc.

Fresh fruit, stewed, made into jams, etc.

Dried fruits, stewed (prunes, apricots, etc.)

Dried fruits, raw (dates, figs, etc.)

2. Cover the fruit with $\frac{1}{2}$ "-1" of either a drop or a roll dough (for possible doughs, see table and comment, page 69).

3. Bake pudding 15-30 min. in a hot oven.

4. Serve with cream and sugar or with hard or other pudding sauce; hot pudding sauce made with fruit juice (see page 78) is often desirable.

Notes:

1. One large pudding may be made, or several small puddings. Turn them from the molds before serving them, if desired.

2. Cranberry sauce for use in class is as follows:

2-4 tb. water

2 tb. berries

2 tb. sugar

3. Meat or fish pies are made on the order of fruit cobblers by the substitution of meat or fish for the fruit. Cheap cuts of meat may be used. Cover meat with gravy before adding the dough.

VII. Fungy

(Dumplings stewed in a fruit sauce)

Method:

1. Stew blueberries or other fruit and sweeten them to taste.

2. Prepare a very plain drop-biscuit dough as follows (compare with meat-stew dumplings):

4 tb.	2 c. pastry flour
$\frac{1}{3}$ t.	4 t. baking powder
$\frac{1}{16}$ t.	$\frac{1}{2}$ t. salt
1 t.	2 tb. fat
2-2 $\frac{1}{4}$ t.	Water or milk for a drop dough, that is, a little more than $\frac{3}{8}$ c.

3. Drop dough by the tablespoonful into the boiling hot fruit; cover tight; allow the fruit to boil 12-15 min., or until the dumplings are very light, then turn the latter like doughnuts, and boil them 1-3 min. longer.

4. Serve with cream and sugar.

Note:

Blueberry fungy is a Nova Scotia recipe and was derived from the Indians.

VIII. Shortcake

(Prepared from biscuit dough)

Method:

1. Roll the following biscuit dough to $\frac{1}{2}$ "- $\frac{3}{4}$ " thickness and shape into rounds the size of pie tins:

4 tb.	2 c. pastry flour
$\frac{1}{2}$ t.	4 t. baking powder
$\frac{1}{16}$ t.	$\frac{1}{2}$ t. salt
2 t.	$\frac{1}{3}$ c. fat
2 t. (or a little less)	$\frac{1}{2}$ - $\frac{5}{8}$ c. milk or water

2. Bake the dough in the pie tins 10-15 min. in a hot oven, 437° F., or 225° C.

3. Split the dough with a fork while it is hot, add a choice of the following fruits, then sprinkle with sugar:

Stewed fruit

Raw fruit, such as:

Apricots, sliced

Peaches, sliced

Strawberries, crushed

Oranges, sliced and sugar added

Bits of butter and plain or whipped cream are also possible additions to the filling.

One-half a raw orange is sufficient for use with the class recipe for dough.

4. Place halves of shortcake together and garnish with one or more of the following:

Fruit (such as whole strawberries or orange sections)

Powdered sugar

Sweetened whipped cream (whip cream just before serving)

Notes:

1. The given recipe is for a short dough; that is, it contains more fat, or shortening, than ordinary biscuit dough. If desired, a little sugar may be added to the dough, or eggs may be substituted for part of the milk or water. A rich dough is generally used in shortcake for adults, but for children it is well to use a plain dough containing no sugar and only the minimum quantity of fat.

2. Shortcake is sometimes baked as follows:

- a. Roll biscuit dough as thin as for sugar cookies, that is, about one-half as thick as for biscuits.
- b. Cut dough into large rounds (size of a pie plate) or into small rounds (size of cookies, and good for individual shortcakes).
- c. Butter the top of a round.
- d. Place a second round on top of it, and bake.
- e. Separate the two, add fruit filling, and garnish.

The rounds may be baked separately, if preferred.

PUDDING SAUCES

I. Solid or semi-solid sauces, such as:

Hard sauce (an uncooked sauce)

Fruit jellies

II. Liquid or semi-liquid sauces:

Thickened with starchy material (see general recipe, page 78)

Thickened with egg, such as:

Soft custard

Creamy sauce

Yellow sauce

Not thickened with starch or egg, such as:

Sirup sauces (such as caramel)

Fruit juices (boiled down until as thick as heavy cream)

Cream (whipped or not), sweetened and flavored

Hard Sauce**Ingredients:**

	Recipe I
1 t.	$\frac{1}{4}$ c. butter
1 tb.	$\frac{3}{4}$ c. powdered or granulated sugar
2 d.	$\frac{1}{4}$ t. vanilla

	Recipe II
1 t.	$\frac{1}{4}$ c. butter
2 t.	$\frac{1}{2}$ c. brown sugar
4 d.	$\frac{1}{2}$ t. vanilla
$\frac{1}{2}$ t.	2 tb. milk or cream

	Recipe III
	$\frac{1}{4}$ c. butter
	$\frac{1}{2}$ c. powdered sugar
	$\frac{1}{4}$ t. vanilla
	$\frac{1}{2}$ yolk of egg, unbeaten or beaten
	Nutmeg, grated

	Recipe IV
	$\frac{1}{4}$ c. butter
	$\frac{1}{2}$ c. powdered sugar
	$\frac{1}{2}$ white of a large egg, unbeaten
	2 t. cream
	Nutmeg, grated
	Dash of cinnamon

Method:

Use this method with all four sets of ingredients, as well as with any other variations.

1. Cream the butter, add sugar, and beat until mixture is very smooth and light.
2. Add flavoring extract, if any is called for.
3. Add any remaining liquid, such as milk, cream, or yolk or white of egg; with the exception of the yolk, add the liquid almost drop by drop so as to prevent curdling.
4. Beat the entire mixture very thoroughly, and shape it into small balls, or place it in a mold, such as an orange shell.
5. Sprinkle with nutmeg, if this is called for, and chill.
6. Slice, and serve on hot puddings.

Notes:

1. The first set of ingredients given is the one ordinarily used.
2. A delicious sauce (especially good on cooked rice) is made by beating the following together thoroughly just before time for serving:

1 c. hard sauce (any kind)

1-2 c. crushed fruit (such as strawberries, raspberries, or cherries)

No harm results from a curdled appearance of the sauce. The sauce is less likely to curdle if it is beaten constantly and the fruit is added gradually. One authority asserts that the mixture is less likely to curdle if honey is substituted for sugar in the hard sauce.

3. Stiffly beaten white of egg is sometimes added to plain hard sauce or to the fruit hard sauce mentioned in Note 2. (See recipes in standard cookbooks.)

4. Except where the yolk of egg is already present as coloring matter, pink or another tint may be added to hard sauce.

Caramel Sauce

Ingredients:

2 tb.	1 c. granulated sugar
3 tb.	1 c. boiling water

Method:

1. Stir the sugar over a fire until it is melted into a light brown sirup. (The temperature of this melted sugar is very high, hence beware of burning the fingers.)
2. Add boiling water, and stir to dissolve any lumps formed.

Notes:

1. Explain the formation of so many bubbles when the water is added to the sirup. Why is it a little better not to add cold water? Why does the sirup tend to harden or contract into lumps when the water is added? What is the temperature of boiling water? the temperature of caramel?

2. Caramel flavoring, made the same as caramel sauce except for the reduction of the quantity of water added to the melted sugar, may be kept in bottles and be used for ice creams, etc.

Hot Pudding Sauce**Ingredients:**

$\frac{1}{4}$ tb. corn- starch	$1\frac{1}{2}$ tb. cornstarch (or $\frac{3}{8}$ tb. arrowroot or $2\frac{1}{4}$ tb. flour)
dash	t. salt
0-1 tb.	0- $\frac{3}{4}$ c. sugar (granulated, brown, or maple)
3 tb.	1 c. cold liquid, selected singly or in any combination from the following:
	Water
	Milk (fresh or condensed)
	Cream
	Fruit juice, mild (such as grape)
	Jelly or jam, diluted with water to consistency of thin cream
	Sirup (such as strained honey or maple sirup), diluted with water to consistency of thin cream
to taste	Flavoring if desired, such as:
	Sour fruit juice (lemon, lime, etc.)
	Grated rind of lemons or oranges
	Spice (nutmeg, cinnamon, etc.)
	Butter (about 1 t.)
	Extract, about $\frac{1}{2}$ t. (vanilla, etc.)
	Melted chocolate

Method:

1. Mix the dry ingredients together thoroughly.
2. Add an equal quantity of cold liquid and stir to make a smooth paste.
3. Add the remainder of liquid, then, stirring constantly, boil the mixture 3-5 min., or until it is transparent (except in the case of a flour sauce) and as thick as cream; if preferred, cook it 15-20 min. in a double boiler. If cornstarch has been used as thickening, it is well to allow extra time for cooking. (Why?)
4. Serve hot (or occasionally cold). Coloring paste and extra flavorings, if used, should be added just before the sauce is served.

Notes:

1. Coloring paste or chopped fruit or nuts may be added to the sauce.
2. Arrowroot produces a much clearer sauce than cornstarch. Flour produces an opaque sauce.
3. Use less than the stated quantity of cornstarch (or arrowroot or flour), if preferred.
4. Egg may be used as part of the thickening.
5. In making lemon sauce, use 1 c. water, 3 tb. sugar, 1 tb. lemon juice, etc. (Do not cook lemon juice, else the flavor is lost.)
6. Chocolate contains starch, hence in chocolate sauce cornstarch or a substitute is not essential. The following hot-fudge sauce is good on pudding, ice cream, etc.:

3 tb.	$\frac{1}{2}$ c. cold water or milk
1 tb.	$\frac{1}{3}$ c. sugar
1 t.	$\frac{1}{2}$ square of bitter chocolate, finely grated
4 d.	$\frac{1}{4}$ t. vanilla

Mix the chocolate with the sugar and proceed with the method for hot pudding sauce, allowing about 15 min. for the boiling process.

7. Explain why hot pudding sauce is considered a derivative of white sauce (see *Food Economy*, pages 68-69).

Apple Strudel (Hungarian)

(Optional lesson)

Ingredients:

(9 or 10 servings)

	Dough:	
4 tb.		1 c. bread flour
$\frac{1}{16}$ t.		$\frac{1}{2}$ t. sugar
$\frac{1}{16}$ t.		$\frac{1}{4}$ t. salt
$2\frac{1}{2}$ t.		$\frac{3}{8}$ c. (6 tb.) lukewarm water
$\frac{1}{2}$ t.		2 t. egg, beaten slightly
$\frac{1}{2}$ t.		2 t. butter or a substitute, melted and cooled
$\frac{1}{8}$ t.		Fat (about 2 tb.) melted, to sprinkle on the dough just before the stretching process; see step 6
	Filling (see Note 1):	
$\frac{1}{4}$ t.		1 tb. fat, melted
$\frac{1}{2}$ large greening		2 qt. thin slices of very tender greenings
8 raisins		$1\frac{1}{2}$ c. raisins or currants (soaked in cold water, then puffed in hot water)
2 meats		$\frac{1}{2}$ - $\frac{3}{8}$ c. nut meats, chopped (such as almonds)
2 tb.		$1\frac{1}{4}$ c. sugar, dark brown
$\frac{1}{16}$ t.		1 t. cinnamon

Method:

1. Prepare the dough by adding the dry ingredients to a mixture of the three wet ingredients.

2. Beat the dough in a bowl (or on a board) with one hand 8-10 min., or until the dough has the following characteristics (see Note 2):

- It is as smooth as satin (no lumps).
- It is very soft (like *soft* biscuit dough).
- It does not stick to the fingers or the bowl (dough should be as soft as can be worked without having it stick).
- It is elastic (ball of dough should not snap in pieces when it is stretched).

3. Place the beaten dough on a floured board, cover it with a warm towel (almost hot) and a warm inverted bowl or basin (almost hot), and let it stand, or "mellow," 10-15 min. in a warm place. (Prepare the class recipe for filling during this 10-15 min. period.)

4. Cover a table $3\frac{1}{2}$ -4 feet square with a smooth white cloth, and sprinkle the entire cloth with flour. A discarded tablecloth, starched, may be used.

5. Place dough in center of cloth, and roll it with a rolling pin until it is about 1 ft. in diameter.

6. Sprinkle dough with about 2 tb. melted fat and gently rub it into the dough with a spoon (the fat keeps the dough soft).

7. Let two persons stretch the dough in all directions until it covers the table in a sheet as thin as tissue paper and of even thickness; do not tear it. Observe the following rules during the stretching process:

a. Steadily and slowly walking around the table, place the hands, palms up, under the rolled dough and stretch dough very gently. Hold hand flat or almost flat, and work with whole hand, that is, whole palm and extended fingers; do not bend fingers up to any extent. Use the cushions, or inside of fingers, somewhat, but avoid the finger tips; the latter tear the dough.

b. As far as possible, avoid the formation of a thick border by stretching any thickened parts that may tend to form (this border wastes the dough).

8. Remove any tough border which may have formed and hangs over the edge of table. Shears may be used if desired.

9. Let dough stand 5-25 min., not until it is brittle, but until it is thought that the tissue is so dry that it will not stick when rolled. The number of minutes required depends upon the temperature of the room.

10. Almost cover dough with a thin layer of apple filling. (To prepare the filling, mix all the ingredients together in a bowl.)

11. Roll dough, as follows, like a jelly roll:

a. Place the hands about a yard apart on the edge of cloth.

b. Holding the edge of cloth high, jerk the cloth in such a way that the cloth rolls the dough. Do not touch the hands to the dough.

Observe the following precautions:

a. Do not roll the dough before it is really dry, else the strudel will not be flaky and like tissue paper.

b. Roll the dough loosely so as to permit air spaces (air makes recipe light) and so as to have the layers separate and flaky and standing up lacey in effect, dainty and delicate in texture.

12. Turn in the ends of roll, fasten the edges securely so that the juices cannot escape, then twist the roll into fancy shapes, such as the following:

Pretzel or letter S

Coil or circle

Horseshoe

13. Place roll in a greased pan, place bits of butter on top, and bake it in a moderate oven 40-60 min., or until filling is tender and the roll is crisp and brown. Baste roll during the baking if desired, using a little butter or cream.

14. Serve strudel hot, with cream and powdered sugar, as a dessert.

Notes:

1. Various other kinds of strudel may be made by the substitution of the following fillings for apple filling:

Chocolate filling

Fruit fillings, cooked or raw, such as:

Cherries, sour

Marmalades

Prunes

Savory fillings:

Almonds, chopped

Cheese, cottage

Cheese, grated

Meat or fish, creamed (chicken, salmon, etc.)

Rice

Salt and black pepper

A few bread crumbs should be added to fillings prepared from cherries, berries, and other very juicy fruits (the crumbs absorb the juice).

The use of certain of the savory fillings results in so-called complete dishes.

2. The vital part of the method is step 2. The success of the recipe seems to consist in bringing the gluten of dough to a high degree of elasticity, kneading and warmth being the agents. (See *Food Economy*, page 78, Note 2.) Pupil to relate this recipe to other work on gluten.

3. Individual strudel may be made from the large recipe, if preferred.

4. Strudel is an excellent handwork lesson (requiring 90-120 min.). The class recipe for dough covers a board 18"×16". Let the pupils bring old starched napkins from home.

5. Instructor, if possible, to secure for the class a demonstration of strudel by a mother expert in making strudel.

UNLEAVENED BREADS

Hard-Tack Bread

Ingredients:

2 tb.	2½ c. bread flour
⅛ t.	½ tb. sugar
⅛ t.	½ tb. salt
1½ t.	Cold water enough for a stiff dough

Method:

1. Mix all the ingredients and knead until dough is very elastic.
2. Roll dough as thin as a soda cracker, prick, score with a knife, and bake it in a quick oven.

Note:

This bread is quickly made, is wholesome, and keeps like hard-tack.

Unleavened Corn Bread

Ingredients:

3 tb.	3 c. corn meal
½ t.	1 tb. sugar
dash	1 t. salt
½ t.	1 tb. lard or bacon fat
2 t.	Boiling water enough to make a stiff dough

Method:

1. Mix as for baking-powder biscuits.
2. Spread dough ½" deep on the top or bottom of a greased tin and bake it in a quick oven until it is crisp and brown on both sides. If desired, turn dough over toward the last.

Corn Dodgers

Ingredients:

(6 dodgers)

2 tb.	2 c. corn meal
⅛ t.	1 t. salt
1 tb.	Boiling water enough for a stiff dough

Method:

1. Mix all the ingredients.
2. Mold dough into either of the following forms:
 - Cylindrical or oblong cakes 2"-3" long and 1" in diameter
 - Small, flat cakes about 1" thick

3. Place cakes on a hot sautéing pan or griddle containing but little fat, and sauté until they are brown on all sides; do not cook too rapidly. If desired, bake for a few minutes in an oven, after sautéing.

Notes:

1. Possible additions to the ingredients are as follows:

2-3 t. sugar

1-3 t. lard or other fat

Egg

2. The mixture may be rolled into balls the size of hens' eggs, rolled in flour, and baked in hot ashes to cover. Cabbage leaves may be wrapped about the cakes before they are baked.

3. Sometimes the cakes are cooked on a board before an open fire.

4. Hoe-cake, ash cake, corn pone, etc., are all similar to corn dodgers; corn meal, salt, and water are the only essential ingredients in all of these. Kafir pone and oat cakes are the same except for the kind of meal or flour used.

5. Corn cakes are sometimes cooked in deep fat.

UNLEAVENED AND LEAVENED BREADSTUFFS FOR CAMP LIFE

I. Breads containing no eggs or commercial leaven:

Hard-tack bread

Corn bread

Corn dodgers (egg sometimes used)

Salt-rising bread (see *Food Economy*, page 161)

Etc.

II. Baking-powder or soda products:

Muffins (see page 46)

Corn bread (see page 48)

Biscuits (either roll or drop) and many of their derivatives (see page 66)

Steamed suet puddings (see page 50)

Griddlecakes, such as "Aunt Jemima's" (see page 42)

Etc.

Notes:

1. All leavened flour mixtures, including the foregoing Group II and yeast breads, were evolved from flour mixtures containing no leaven; in other words, leavened mixtures were of later date than unleavened ones.

2. The following is a suggestive menu for a camp lunch or supper:

Fish or clam chowder

Corn dodgers

Rice griddlecakes with brown-sugar sirup

FRUIT PIES

Fruit pies include the following:

Apple	Fig
Apricot	Mango
Berry (strawberry, etc.)	Mincemeat and mock mincemeat
Cherry	Prune
Cranberry, or cranberry and raisin	Raisin
Currant	Tomato (yellow or green)

The following directions for apple pie apply in general to all fruit pies.

Apple Pie

Method:

1. Pare any of the following apples, cut them in quarters, core, and slice thin:

Duchess	Maiden blush
Greening	Northern Spy
Jonathan	Rambo

2. Line a greased pie tin with crust (see page 86), then fill pan with apples level with top. (In class use a $3\frac{1}{2}$ " tin and fill with $\frac{1}{2}$ c. thinly sliced apple—about 1 small apple.)

3. Sprinkle the apples with the following (the small quantities at the left are sufficient for a $3\frac{1}{2}$ " pie):

2 t.	Sugar, white or brown (about 1-3 tb. to each apple)
$\frac{1}{4}$ t.	Bits of butter
dash	A few dashes of flour
spk.	Dash of salt
dash	A few dashes of nutmeg, allspice, or cinnamon
dash	A little lemon juice, if desired, also grated rind
$\frac{1}{8}$ -1 t.	A little water if apples are very dry or hard

Caution: Do not add water to the apples until just before putting on the upper crust. (Why?)

4. Brush the edge of the lower crust with water, then add the upper crust.
5. Roll out the upper crust, and make a few small cuts in it to serve as steam vents during baking; fold the crust in two, lift it, and cover the pie.
6. Press the top and bottom pastes well together on the sides, then trim off the surplus paste.
7. Bake in a moderate oven, 350° F., or 177° C., until the apples are tender and the crust is brown.

Notes:

1. Very juicy fruit should be put into a pie just before baking, else the lower crust may become soggy. Hence, particularly in class, it is well to observe the following sequence:

- a. Place the fruit in a bowl and mix with the flavorings (sugar, spice, etc.).
- b. Prepare the dough, and fit the lower crust.
- c. Roll out upper crust (and leave it on the board until pie is filled with fruit).
- d. Fill pie, add crust, and bake at once.

2. Secure a good color for any fruit pie by rubbing the top surface with one of the following washes before placing the pie in the oven:

- Yolk of egg, beaten well with water or milk
- Sugar and water
- Milk alone

3. It is necessary to stew some apples before using them in pies; most ripe cooking apples require no previous cooking.

4. A little grated cheese may be sprinkled over the flavored apples before the upper crust is put on.

5. Corn sirup may be substituted for sugar. Use more than of sugar. Why? What change should be made in the quantity of water added to the pie?

6. A one-crust apple pie is made the same as a two-crust pie except for the following changes:

- a. Fill lower crust with raw or stewed apples, using more apples than in a two-crust pie.
- b. Add a little water to apples, also sugar, spice, and butter.
- c. Omit upper crust entirely. If preferred, however, cover apples with a lattice work of strips of pie crust or puff paste; roll dough as for crust, and cut in $\frac{1}{2}$ "-1" strips; brush edge of lower crust with water before adding these strips.
- d. Bake until apples are tender and brown.

Bright-colored fruits, such as cherries, make attractive looking lattice-work pies.

Mock Mincemeat Filling

Ingredients:

(8" pie)

	Thin sauce (made by any of the white-sauce methods):
1 t.	3 tb. flour
1 t.	2 tb. butter or a substitute
$\frac{1}{4}$ c.	2 c. water (or sweet cider)
	Fruit:
14 black	$\frac{1}{2}$ c. raisins
1 tb.	$\frac{1}{2}$ c. dried currants
2 t.	$\frac{1}{4}$ c. chopped citron (or preserved lemon or orange rind)
2 tb.	1 c. chopped raw apples
$\frac{1}{4}$ t.	1-1 $\frac{1}{2}$ t. mixed spice (cinnamon, cloves, mace, and nutmeg)
dash	$\frac{1}{4}$ t. salt
$\frac{1}{8}$ t.	1 t. grated lemon rind
$\frac{1}{2}$ t.	1 tb. lemon juice
1-2 t.	$\frac{1}{4}$ c. molasses (not strong in flavor)
1 t.	2 tb. crab-apple jelly

Method:

1. Wash the raisins and currants, soak them 1 min. in boiling water, then drain them.
2. Mix all the ingredients in the recipe except the lemon juice, cook them until the mixture is as thick as a very stiff drop batter, then add lemon juice.

Notes:

1. The class recipe is sufficient for a $3\frac{1}{2}$ " pie.
2. If the apples are very sour, add a little sugar to the recipe.
3. A beaten egg may be added the last thing.
4. Raisin pie is made by the substitution of raisins (extra) for the currants and apples in the given recipe; prune and apricot pies are made in a similar manner.
5. Another good vegetarian filling is made by the substitution of green tomatoes for the meat of real mincemeat.

Pie Crust*(A stiff dough)***Ingredients:***(A two-crust 8" pie)*

$3\frac{1}{2}$ tb.	1 c. pastry flour
$\frac{1}{16}$ t.	$\frac{1}{8}$ t. salt
1 tb.	$\frac{1}{4}$ - $\frac{1}{3}$ c. cold fat, or shortening
$1\frac{1}{4}$ t.	About 3- $3\frac{1}{2}$ tb. cold water (preferably ice-water)

Method:

1. Sift together the flour and salt.
2. Add the fat, and chop until the mixture looks like meal, each little particle of fat being coated with flour. Use a fork or two knives. Do not use the fingers. (Why?) (If any butter is used, wash it first so as to make it pliable, for, if too hard, it will not mix well with the flour, and a tough crust will result.)
3. Make into a stiff dough by using the smallest quantity of water possible; add but a few drops of water at a time and cut it in lightly, but thoroughly. Use only enough water to hold the dough together. The dough should not be crumbly, nor should it stick to the knife or the bowl.
4. Toss the entire quantity of dough upon a lightly floured board, and with as little handling as possible shape it into a ball. Roll it lightly to $\frac{1}{4}$ " thickness, then roll it up like a jelly roll; this latter process incloses air. Cut into two slices, place each slice in turn on end, and roll it into a thin crust (about $\frac{1}{8}$ " thick).

Notes:

1. Use almost any fat for crust; lard and butter, half and half, yield a very good crust. A third as much fat as flour is an average rule. Corn and other vegetable oils can often be well used for making pastry.¹

¹Blunt, "Vegetable Oils and Their Use in Cooking," *Journal of Home Economics*, January, 1918.

2. Flour varies greatly, but in general the correct proportion for plain pie crust is about twice as much flour as water by weight; for example:

- 4 c., or 1 lb. flour
- 1 c., or $\frac{1}{2}$ lb. water

3. The class recipe is sufficient for one two-crust $3\frac{1}{2}$ " pie. The following ingredients make one large two-crust pie, or two large one-crust pies:

- $1\frac{1}{2}$ c. pastry flour
- $\frac{1}{2}$ t. salt
- $\frac{1}{8}$ – $\frac{1}{2}$ c. fat
- 6 tb. water (or less if possible)

Any scraps of dough left may be made into tarts, cheese straws, etc.

4. A small quantity of baking powder, such as $\frac{1}{4}$ t. to 1 c. flour, insures a light crust, but it is not essential to a crust made by a good cook.

5. Note a good substitute for step 4 of method:

- a. Form a ball and roll it to $\frac{1}{4}$ " thickness. (Then, if desired, sprinkle the rolled dough with small bits of fat and a little flour.)
- b. Fold the dough so as to form three layers, then continue to fold into another set of three layers.
- c. Roll to $\frac{1}{4}$ " thickness.
- d. Repeat *b* and *c* two or three times.

6. A light touch is essential in the folding and rolling process. Do not press heavily upon the rolling pin, else the air caught between the folds will be expelled. Air is necessary for producing a crust that is light, crisp, and flaky; lack of air results in a heavy, tough crust.

7. In what respects is the pie-crust method similar to that for baking-powder biscuits?

FRIED FOODS

FRYING OF COOKED FOODS

Introductory Notes

1. Cooked foods are either left uncoated or are coated before being fried; note examples as follows:

a. Uncoated foods:

Fish balls (such as codfish with potatoes or corn-meal mush)

b. Foods coated with material which hardens quickly and at a low temperature:

Croquettes (see "Four Types of Croquettes," *Food Economy*, page 83)

Cooked cereal in slices or cubes (such as corn meal or hominy)

Vegetables (such as parsnips), boiled until almost tender, then sliced and dipped in batter

Stuffed eggs (halves fastened together with toothpicks), rolled in crumbs and raw egg

2. The fat for frying cooked foods should be hot enough to brown a cube of dry bread in 40 sec.; see temperature tests, page 8. Crisco is a good fat for frying because it does not absorb odors and flavors. (See "General Rules for Frying Any Food," *Food Economy*, page 85.)

Unsweetened Starchy Croquettes

Ingredients:

(10 croquettes)

2 tb.

2 c. cooked starchy food (see Note 1)

Seasonings:

$\frac{1}{2}$ t.

1 tb. butter

dash

$\frac{1}{2}$ t. salt

dash

A few dashes of white pepper or paprika

dash

$\frac{1}{16}$ t. celery salt

$\frac{1}{8}$ t.

1 t. chopped parsley

4 d.

$\frac{1}{4}$ t. onion juice

$\frac{1}{2}$ t.

1 yolk of egg, beaten

Method:

1. Mix all the ingredients, being careful not to add the yolk of egg to very hot potatoes or other food, and beat until mixture is very light and creamy.

2. Cool, and shape a heaping tablespoonful of mixture into a ball, then into a cylinder, cone, pyramid, or other form.

3. Roll croquettes in sifted crumbs or flour, then in egg, then in crumbs again.

4. Cook croquettes in deep fat until they are brown, and drain them on unglazed paper.

5. If desired, serve with a sauce, such as white or tomato sauce or drawn butter. Garnish with parsley.

Notes:

1. Select the starchy food, singly or in any combination, from the following list, cooking all of the foods before measuring them:

a. Vegetables and nuts:

Artichokes, Jerusalem
Dasheens
Potatoes, white
Potatoes, sweet
Yams
Chestnuts

All of the above, as a rule, should be freshly mashed (with no milk or seasonings) before being measured; dry boiled potatoes in an oven or in a sieve over flame before mashing them. Sometimes left-over mashed potatoes, etc., can be used.

b. Cereals:

Corn meal
Farina
Hominy
Rice

c. Flour pastes (prepared in very small pieces, $\frac{1}{4}$ " for example, but not mashed):

Macaroni
Noodles
Spaghetti or vermicelli

2. These croquettes are substitutes for boiled or other potatoes in a meal.

3. This recipe may also be used for making some of the succulent vegetables into croquettes, such as salsify and parsnips.

4. Vary proportions in the recipe as desired, or make any addition or deduction of ingredients; beaten white of egg is sometimes added. A little milk, cream, or white sauce is often necessary as a softening agent. When potato or other croquettes and balls are too soft for molding for either frying or sautéing, add soft bread crumbs rather than any other material; or use heat and evaporation as stiffening agents.

Work with a croquette mixture as soft and creamy as possible.

5. The class recipe yields one small croquette.

6. See "General Method for Croquettes," *Food Economy*, page 84.

Sweetened Starchy Croquettes

Ingredients:

2 tb.

2 c. cooked starchy food, such as a cereal or a flour paste (selected from the list in Note 1 of preceding recipe)

Flavorings to taste, selected singly or in any combination from the following:

1 t. raisins

Dried fruit (dates, raisins, etc.)

Fresh fruit (such as pineapple)

Nuts, chopped

spk.

Salt, dash

$\frac{1}{2}$ t.

Sugar

dash

Spice

Egg

Cream

Method:

1. Follow steps 1-4 of the preceding recipe.
2. Serve croquettes as a dessert or as an entrée; add cream, maple sirup, or a lemon or other sauce.

Notes:

1. Beware of making the mixture too soft to handle; however, heat and bread crumbs are always available as stiffening agents.

2. Shape croquettes in the usual way, or as follows:

- a. Shape balls, then make a hollow in each ball by pressing with the finger.
- b. Half fill the hollow with jelly, jam, soaked raisins, or other fruit.
- c. Close the depression.
- d. Roll croquettes in crumbs, in egg, then in crumbs again, and fry.

Meat and other protein-food fillings may be added in a similar way to unsweetened croquettes.

3. If a square of cheesecloth is used (see method for fruit rice-balls, steamed, *Diet for Children*), perfect balls may be formed for use in the following fried recipes:

Sweetened starchy croquettes (with fruit or other filling in the center, if desired)

Unsweetened starchy croquettes (with meat, cheese, or other protein-food filling in the center, if desired)

FRYING OF UNCOOKED FOODS

Introductory Notes

1. Uncooked foods are either left uncoated or are coated before being fried; note examples as follows:

a. Uncoated foods:

Vegetables, raw, such as:

Potatoes (white or sweet)

Dasheens (delicious fried as chips—similar to potato chips)

Parsnips

Carrots

Apples, raw (sliced and cooked like French-fried potatoes)

Doughnuts (a soft dough)

Muffins (a drop batter; see footnote, page 93)

Timbale cases (a thin batter)

Fritters (a drop batter)

b. Foods coated with some material which hardens quickly and at a low temperature:

Fruit covered with sweetened fritter batter

Fish, meat, and vegetables covered with unsweetened fritter batter

Protein foods covered with material other than batter, such as:

Veal cutlets and chops (breaded)

Fish:

Smelts and other small fish

Scallops

Oysters

Clams

2. Coatings for the protein foods listed in *b* include:

Egg, and crumbs (or corn meal or corn flakes)

Egg, and water or milk

Milk and crumbs

3. The fat for frying uncooked foods, uncoated or coated, should be hot enough to brown a cube of dry bread in 60 sec.; see temperature tests, page 8.

4. Note the following recipe for fried potatoes, that is, potatoes cooked in deep fat.

Fried White Potatoes

Method:

1. Wash and pare potatoes.

2. Cut them into pieces of desired size and shape (see Note 1).

3. Soak them 1–2 hr. in ice water or other cold water in order to make them crisp. (What is seen in the water used for soaking?)

4. Drain, and dry them very thoroughly between towels. (Why?)
5. Cook them 2-10 min. in deep fat until they are tender and brown, the time varying with the size of the pieces. Stir often with a fork while cooking. Fry slices until they are brown. Chips should be crisp and slightly brown.
6. Drain them on a soft paper, then add salt.

Notes:

1. The types of fried raw potatoes, according to the size of the pieces, are as follows:
 - Very small potatoes (fried whole)
 - Potato balls (formed by a French vegetable-cutter)
 - French-fried potatoes (oblong strips about $2\frac{1}{2}" \times \frac{3}{4}" \times \frac{3}{4}"$)
 - Shoestring potatoes
 - Lattice potatoes
 - Saratoga chips (formed by slicing small pared potatoes very, very thin with a vegetable-slicer or a paring knife)
 - Etc.
- Use the general method in frying all of the types.
2. Are old and new potatoes equally good for frying? (Pupil to test.)
3. The frying of potatoes clarifies the fat used. See *Food Economy*, page 87.
4. Corn oil is excellent as a frying medium for potatoes.
5. Avoid danger of fire by observing three precautions:
 - a. Do not have the kettle more than half full of fat.
 - b. Cook only a few pieces of potato at a time. (Why?)
 - c. Dry each chip, ball, or other piece of potato separately before frying. With chips, especially, there is danger of having the fat bubble over. (Why?)
6. State the fuel value per lb. of each of the following, then compare the three values:
 - Lard
 - Raw potatoes
 - Cooked potato chips (as purchased)

Doughnuts

(Soft dough)

Ingredients:

(2 doz. doughnuts)

$\frac{1}{3}$ t.	$1\frac{1}{4}$ tb. butter or a substitute
$\frac{1}{2}$ tb.	$\frac{1}{2}$ c. sugar
1 t.	$1\frac{1}{2}$ eggs, well beaten
$\frac{1}{2}$ tb.	$\frac{1}{2}$ c. milk
dash	$\frac{3}{4}$ t. salt
dash	$\frac{1}{2}$ t. mace
$\frac{1}{8}$ t.	2 t. baking powder
$2\frac{3}{4}$ tb.	Bread flour enough for a soft roll dough (about $2\frac{1}{2}$ c.)

Method:

1. Mix the ingredients according to the standard method for cakes, page 55.
2. Roll dough to $\frac{1}{4}"$ - $\frac{1}{3}"$ thickness and cut with a doughnut-cutter, or roll it with the hands into little balls. In either case the doughnuts should be smooth, having no cracks on the surface.

3. Fry the doughnuts, and drain them on soft paper.

4. When they are perfectly cold, roll them in powdered sugar. Sprinkle them with cinnamon, if desired.

Notes:

1. The class recipe makes one doughnut of ordinary size with a hole in the center, or it makes three or four little balls.

2. With the possible exception of the cake-mixer method, any of the six methods for cakes containing fat (pages 55-57) may be used in making doughnuts.

3. An excellent test for the fat consists in dropping a small bit of dough into it. If the temperature is correct for frying, the dough rises at once to the surface of fat and turns a delicate brown; the fat is too cool if the dough does not rise to the top at once.

4. Note reasons why doughnuts often become soaked with grease:

Fat is too cool.

There is not enough flour in the dough.

5. Estimate the time required for frying by cooking a test doughnut by itself, then breaking it open to see if it is done.

6. Doughnuts sink to the bottom of kettle at the very beginning of frying, then they quickly rise to the surface of fat. Why?

7. Should doughnuts be turned over as soon as they rise to the surface?

8. The coating of fat, which forms on even the best-made doughnuts, is objectionable to persons of delicate digestion. A practical plan for removing much of this surface fat is to plunge the doughnuts (immediately after frying) into boiling water, allowing them to remain for an instant only. (Note layer of fat left on water.)

9. Compare sweet-milk and sour-milk doughnuts as to richness, lightness, etc.

10. Any recipe of the type given is often called fried cakes, or crullers. Doughnuts, properly speaking, are fried bread dough; they contain much less sugar and fat than crullers. Properly speaking, crullers are dough rolled thin and cut in pieces 2" × 3". Cut three or four parallel incisions in each piece, run finger in and out of them, then fry.

Fried Rye Muffins¹

Ingredients:	(9-12 muffins)
1 tb.	$\frac{3}{4}$ c. rye flour
1 tb.	$\frac{3}{4}$ c. bread flour
$\frac{1}{6}$ t.	2 t. baking powder
$\frac{1}{12}$ t.	1 t. sugar
dash	$\frac{1}{4}$ t. salt
1 t.	1 egg, well beaten
2 t.	$\frac{1}{2}$ - $\frac{5}{8}$ c. milk

Fried Graham Muffins¹

Ingredients:	(8 muffins)
2 tb.	1 c. graham flour
$\frac{1}{4}$ t.	$1\frac{3}{4}$ t. baking powder
$\frac{1}{8}$ t.	$\frac{1}{4}$ tb. sugar
1 tb.	2 eggs, well beaten
$\frac{1}{2}$ tb.	$\frac{1}{4}$ c. milk

Method:

Use this method with both rye and graham muffins.

1. Sift the dry ingredients together, then add to a mixture of the wet ingredients.

2. Fry by the tablespoonful; cook muffins until they are no longer sticky when tested with a toothpick.

¹ Fried muffins (a drop batter) are more correctly called fritters.

Timbale Cases*(Thin batter)**(20 cases)***Ingredients:**

1 tb.	$\frac{3}{4}$ c. bread flour
$\frac{1}{4}$ t.	2 t. sugar
dash	$\frac{1}{2}$ t. salt
1 t.	1 egg, beaten very slightly
2 t.	$\frac{1}{2}$ c. milk
$\frac{1}{4}$ t.	1 tb. fat, melted and cooled

Method:

Steps 3, 4, and 5 deal with the preparation of a single timbale case.

1. Gradually add the dry to the wet ingredients, and blend them into a very smooth batter. (Why add gradually?) Avoid beating in air, since air will make the timbale cases puff in spots while frying.

2. Let batter stand until any possible air has escaped; no air bubbles should be visible.

3. Heat timbale iron very hot in fat and then remove surplus fat from it by means of a soft cloth; avoid an iron that is too hot or too cold.

4. Place batter in a deep cup or bowl, dip hot iron into it, and let it stand 4 or 5 sec. Dip iron into batter only one-half to three-quarters of the depth of iron, since the batter will rise later. Batter should adhere to iron in a smooth coat without air bubbles.

5. Insert iron at once into hot fat, and cook timbale case about 12 sec., or until it is brown and crisp. Fat must be deep enough to more than cover iron. If fat is too hot, shell will burn; if fat is too cool, shell will be soggy and soaked with grease.

6. Drain timbale cases by placing them upside down on soft paper.

7. Fill timbale cases with any of the foods named in Note 1.

Notes:

1. The filling may consist of fruits, vegetables, meats, or fish; semi-dry foods are best used in timbale cases because the cases are so thin.

The two chief types of fillings are as follows:

a. Sweet fillings:

Fresh fruits	} cut in cubes and garnished with whipped cream
Jellies	

Use timbale cases with sweet fillings as desserts; 1 t. extra sugar may be added to the given timbale batter.

b. Unsweetened fillings (usually creamy):

Chicken or veal

Fish (such as finnan haddie)

Mushrooms

Oysters

Vegetables:

Asparagus

Carrots

Cauliflower

Celery

Peas (good with Spanish onions)

2. Heat iron as well as fat very slowly. The iron should be reheated for each dipping.
3. Soft timbale cases (not the desirable crisp ones) result from a batter that is too thick; thin such batter with milk.
4. A desirable class plan is for each pupil to prepare the class batter recipe, then for part or all of the pupils to unite their small quantities in a central bowl, previous to the time of frying. If preferred, one pupil may prepare the large recipe for the class.
5. Note the various forms in which irons are sold:

Cube
Diamond
Heart
Oval
Rosette

The irons last a lifetime. What is the average price of an iron?

6. Homemade timbale cases, or shells, are very inexpensive as compared with the commercial ones. Pupil to determine the price per dozen of each.
7. Timbale shells are more digestible, also less expensive, than patty shells.

FRITTER BATTERS

(For use chiefly in frying)

Various recipes are possible for fritter batters; the first five recipes below are derived from Farmer, *The Boston Cooking-School Cook Book*, pages 348-349. Recipe VI is a small recipe for class use.

Recipe I	Recipe II	Recipe III
1 c. bread flour	1 c. bread flour	1 $\frac{1}{3}$ c. flour
$\frac{1}{2}$ t. salt	$\frac{1}{4}$ t. salt	$\frac{1}{4}$ t. salt
Few grains pepper	1 tb. sugar	2 t. baking powder
$\frac{3}{8}$ c. milk	$\frac{3}{8}$ c. water	$\frac{3}{8}$ c. milk
2 eggs, well beaten	1 white of egg, beaten stiff	1 egg, well beaten
	$\frac{1}{2}$ tb. olive oil	
Recipe IV	Recipe V	VI. Class Recipe
1 c. flour	1 c. flour	3 tb. bread flour
$\frac{1}{4}$ t. salt	$\frac{1}{4}$ t. salt	Dash of salt
3 tb. powdered sugar		1 t. sugar
1 $\frac{1}{2}$ t. baking powder		$\frac{1}{4}$ t. baking powder
$\frac{1}{3}$ c. milk	$\frac{3}{8}$ c. milk or water	1 $\frac{1}{4}$ tb. milk
1 egg	2 yolks of eggs, well beaten	2 t. beaten egg (whole egg)
	2 whites of eggs, beaten stiff	1 t. stiffly beaten white of egg
	1 tb. melted butter or olive oil	$\frac{1}{2}$ t. fat, melted

Notes:

1. Recipes for both unsweetened and sweetened fritter batters are included in the six recipes given above; see page 96 for the uses of these two types of batters.

2. Select from these or other recipes according to the fruit, vegetable, or other food used.
3. All of the batters are mixed according to the muffin method (see Method II for muffins, page 46). If the whites and yolks of eggs are beaten separately, fold in the whites at the very last.
4. Timbale batter is really a thin fritter batter containing little or no air and no commercial leaven.

Fritter Batters Classified According to Sweetness

I. Unsweetened batter:

This is used as a coating for the following:

1. Fish, such as:
 - Smelts, and other small fish
 - Slices of larger fish
 - Oysters or clams (in making fritters from either, use the liquor as wetting)
2. Vegetables, chopped or sliced:

Cauliflower	Egg plant
Celery	Onions, Spanish
Corn	Parsnips
Cucumbers	Etc.

The majority of these vegetables should be boiled partially or wholly tender before being fried.
3. Grated cheese, or chopped meat or fish (Stir any of these into plain fritter batter, then fry by the spoonful.)

II. Sweetened batter:

This is used in either of the following ways:

1. Fried by itself as plain fritters
2. Used as a coating for any fruit that is either chopped or sliced; add as much fruit as the batter will cover. Circular slices of pineapple, etc., are pretty. Canned fruits may be used if all sirup is removed. Fresh fruit fritters include the following:

Apple	Orange
Apricot	Peach
Banana	Pear
Berry	Pineapple

Notes:

1. Sprinkle sweet fritters with powdered sugar after frying them.
2. Two types of apple fritters are made as follows:
 - a. Add chopped apples to thick batter and fry by the spoonful.
 - b. Core apples and cut them in $\frac{1}{4}$ " round slices. Dip slices in a mixture of sugar, cinnamon, and lemon juice, then dip them in thin batter and fry.
3. Dip elderberry flowers in sweetened batter and fry. Hold them by the stem both in dipping and in frying; the green portion is thus left standing and in view for serving.
4. Another type of sweet fritters ("queen") is derived by frying cream-puff batter; chocolate is sometimes added to this batter or to ordinary fritter batter.

Fritter Batters Classified According to Thickness***I. Thin, or cover batter, about 1:1:***

This is used as a covering for *sliced* fruit, fish, etc., where the aim is to preserve the shape of the article of food. The following are the two batters used for cover fritters:

1. Popover batter: Use ordinary popover batter, making no changes in it except for the addition of a little extra flour if batter is too thin to cling to food (Add no leaven.)
2. Sweet-milk griddlecake batter

II. Thick, or drop batter, about 2:1:

Add *chopped* fruit, meat, or other food to an ordinary baking-powder muffin batter, and fry by the spoonful; or fry the batter without the addition of fruit or other food. Make no changes in the muffin recipe except for the use of less fat and more eggs.

Notes:

1. It is essential that very little fat be used in any of the fritter batters; if this precaution is not observed, the mixture will break into bits in frying. Occasionally, corn or other fritters are sautéed, not fried; in this case the quantity of fat in the fritters makes less difference. These sautéed fritters are usually made from a thin batter.
2. In case fritters do not hold their shape when dropped into fat, add more flour; and, if need be, have the batter too thick rather than too thin.
3. A thin fritter batter is sometimes made without addition of leaven; the drop batter is so heavy with flour that baking powder or other leaven must be added to it.
4. Beware of frying batter in fat that is not hot enough. Experiment with hot and cooler fat and compare results.

FRIED PROTEIN FOODS**Fried Fish*****Method:***

1. Clean any of the following fish, then wipe them dry:

Small fish left whole (perch, smelts, etc.)

Larger fish, cut in slices called steaks or fillets (halibut, salmon, etc.)

Heads and tails should be left on smelts.

2. Sprinkle fish with salt and pepper.

3. Dip fish in turn into flour, egg (2 tb. water to 1 egg), and fine, sifted crumbs.

4. Cook them 3-6 min. in deep fat. In frying smelts or other small fish, remove fat to back of range very soon after fish are added, in order that the fish may not become too brown before being cooked through.

5. Arrange fish on a hot platter and garnish with parsley, slices of lemon, and sauce tartare or maître d'hôtel butter.

Notes:

1. Smelts may be fried without being skewered, but, with the possible use of toothpicks as skewers, they may be skewered into a variety of shapes.

2. If preferred, dip the raw fish into fritter batter instead of into crumbs and egg, using the same batter as for oysters in the following recipe. (A turban of fish is a $\frac{1}{2}$ " slice of fish rolled, fastened with a toothpick, dipped in batter, and then fried.)

Fried Oysters

Method:

1. Dry oysters and sprinkle them with salt and pepper.
2. Roll them in turn in bread or cracker crumbs, egg (1 tb. milk or water to 1 egg, slightly beaten), and then crumbs again.
3. Cook the oysters 1-2 min. in deep fat, drain, and garnish with parsley.

Note:

A second method is as follows:

- a. Dry oysters and sprinkle them with salt and pepper.
- b. Dip them in the following batter (mixed by the muffin method), then cook in deep fat:
 - 1 c. flour
 - 1 t. salt
 - $\frac{1}{8}$ t. pepper
 - $\frac{1}{2}$ t. baking powder
 - $\frac{3}{4}$ c. milk
 - 2 eggs, beaten

Fried Cheese Balls

Ingredients:

2 t.	1½ c. grated cheese
dash	$\frac{1}{4}$ t. salt
spk.	Cayenne
$\frac{1}{4}$ t.	1 tb. flour
1 tb.	3 whites of eggs, beaten stiff

Method:

1. Fold the cheese, seasonings, and flour into the whites of eggs.
2. Mold mixture into small balls, roll them in cracker dust, and brown them in deep fat.
3. Serve hot with salads.

CANDIES

Candies and all other forms of sugar are important sources of energy.

CLASSIFICATION

Candies fall into definite groups in the three classifications which follow, and the general directions are the same for cooking all the members of any one group.

I. Candies classified according to crystallization:

1. Large crystals (rock candy is the only candy in which large crystals are desired)
2. Very small crystals (fondant and other cream candies)
3. No crystals (brittles, etc.)

II. Candies classified according to whether raw or cooked:

1. Uncooked candies (these are few in number and include simple candies made with confectioner's sugar)
2. Cooked candies:
 - a. Candies cooked by dry heat, such as nut brittle (see *Diet for Children*)
 - b. Candies cooked by moist heat, such as fondant

III. Candies classified according to temperature tests and the corresponding cold-water tests:

Amy Daniels¹ gives the following tests:

When sucrose (cane sugar) is the principal sugar used in the candy mixture the following temperatures are given by sirups of different consistencies:

Soft ball.....	113° C.	Hard crack.....	145° C.
Hard ball.....	122° C.	Barley.....	149° C.
Crack.....	132° C.	Caramel.....	154° C.

But when a considerable amount of glucose is used in the candy, these consistencies are reached at lower temperatures. For example, when two parts of cane sugar are used to one part of glucose, the typical consistencies are reached at the following temperatures:

Soft ball.....	112° C.	Hard crack.....	135° C.
Hard ball.....	118° C.	Barley.....	141° C.
Crack.....	125° C.	Caramel.....	144-150° C.

When equal quantities of glucose and cane sugar are used, the sirups register as follows:

Soft ball.....	111° C.	Hard crack.....	125° C.
Hard ball.....	116° C.	Barley.....	138° C.
Crack.....	122° C.	Caramel.....	142° C.

¹Amy Daniels, "The Influence of Glucose on the Cooking Temperatures of Candy Syrups," *Journal of Home Economics*, December, 1914.

When glucose alone is used, the typical consistencies are reached at even lower temperatures:

Soft ball.....	110° C.	Hard crack.....	122° C.
Hard ball.....	114° C.	Barley.....	128° C.
Crack.....	120° C.	Caramel.....	133° C.

Louise Stanley¹ states the following candy tests:

	° F.	° C.		° F.	° C.
Small thread.....	215	102	Soft ball.....	238	113
Large thread.....	217	103	Hard ball.....	248	120
Pearl.....	220	105	Small crack....	290	143
Large pearl.....	222	106	Crack.....	316	155
The blow.....	230	110	Caramel.....	360	175
The feather.....	232	111			

The following data are derived from a booklet² in which sucrose candies are chiefly considered:

	° F.	° C.
Soft ball stage ...	236-242	113½-117
Hard ball stage ..	254	123½
Crack stage.....	260-275	127-135
Hard crack stage.	290	143½
Caramel stage....	300-350	149-176

Cold-water tests, as follows, are taken from the same booklet:³

The sugar and water boiled together reaches the soft ball stage when a portion dropped into cold water can be gathered up with the fingers into a soft ball.

The hard ball stage is reached when the portion tested forms a firm, compact ball.

At the crack degree, the portion tested becomes slightly brittle and can no longer be molded into a ball. In other words, it is the point at which the candy first becomes "snappy."

The hard crack is the stage at which the portion tested becomes hard and brittle.

Pupil to add to the following list, noting that no very fixed list can be given inasmuch as recipes for any one candy often vary considerably in composition:

Soft-ball candies:

Fondant
Fondant derivatives (such as fudge)

Crack-stage candies:

Toffee
Butterscotch
Vinegar candy
Molasses candy
Divinity creams
Pop-corn balls
Crackajack

Hard-ball candies:

Caramels (chocolate, etc.)
Buttercups

Hard-crack candies:

Glacé fruit
Etc.

Barley-stage candies:

Barley candy
Horehound candy

Caramel-stage candies:

Nut brittles (such as peanut)

¹ Louise Stanley, *Principles of Candy Making*, 1911, Home Economics Department, University of Missouri.

² *The Making of Candy*, Home Economics Department, School of Education, University of Chicago.

³ *Ibid.*

FONDANT*I. Types of fondant:*

White
Maple
Coffee
Caramel
Etc.

II. Uses of each of the types of fondant:

Centers of chocolate creams
Filling for dates, prunes, cherries, pulled figs, and other fruits
Bar or loaf candy
Outside or centers of bonbons (see Note 4)
Nut creams
Frosting for cake
Patties (all flavors and tints)
Etc.

Notes:

1. Many more than the items listed may be made from fondant.
2. In making any of the candies, etc., listed, use the fondant in either of the following forms:

Plain

Mixed with any of the following:

Nuts	} chopped
Dates	
Figs	
Candied cherries	
Coconut	
Various flavors	
Etc.	

3. Knead fondant before molding it into candies so as to improve the texture; a little glucose is sometimes added to make a more pliable product. If fondant is not molded, melt it in a double boiler; a double boiler is used for each of the following processes:

Dipping of bonbons and sections of orange and pineapple in fondant
Dropping or pouring of fondant to form patties, coconut bar, cream loaf, chocolate creams, etc.
Frosting of cakes or éclairs with fondant

4. A bonbon consists of a ball of fondant in the center of which is found one of the following fillings:

Nut meat (any kind)
Almond paste
Cherry (fresh, candied, or maraschino)
Grape, white, etc. (pretty bonbons are made by inclosing green grapes in light green fondant)
Fondant mixed with chopped nuts and fruits, such as figs
Etc.

5. To make chocolate-covered candies, dip nuts, molded shapes of fondant, etc., into either of the following ingredients, melted in a double boiler:

Bitter chocolate

Sweet chocolate (use only the regular coating chocolate, to be secured from any confectioner)

The addition to the chocolate of a little cocoa butter or paraffin results in extra gloss. Do not overheat chocolate, else it will streak and be dull.

6. Note the following suggestions for a class lesson on fondant derivatives:

a. Bring the following from home:

Candy box or basket

Paraffin paper

Paper cases for individual candies

Nuts and fruits

b. Shape chocolate creams in the following forms:

Balls

Horseshoes

Cones or steeples

Ovals

Crescents

Pyramids

Cubes

Etc.

c. Remember that all good candies are of delicate color and flavor.

7. Fudges, such as the following, are closely related to fondant:

Chocolate fudge

Penocha (brown-sugar fudge)

Maple fudge

Opera creams (white fudge)

Etc.

All fudges should be of a creamy consistency and glossy on top.

White Fondant

Ingredients:

$\frac{3}{4}$ c.	5 c. granulated sugar
$\frac{1}{3}$ c.	$1\frac{1}{2}$ c. water
$\frac{1}{16}$ t.	$\frac{1}{4}$ t. cream of tartar

Method:

1. Mix all the ingredients, and stir them over a low flame only until the sugar is thoroughly dissolved; use a saucepan which is very smooth inside, such as a new granite pan.

2. Boil the sirup, without stirring, to the soft ball stage (238° F., or $114\frac{1}{2}^{\circ}$ C.) if soft fondant is desired; 242° F., or $116\frac{2}{3}^{\circ}$ C., for harder fondant. (It is much better to use a thermometer than to depend upon a jelly-like ball in cold water, that is, a mass that can barely be picked up by the fingers.)

It is well to wash the sides of the pan continually with a fork wound with wet cheesecloth. (Why?)

3. Slightly oil a marble slab and pour sirup upon it, holding sirup as near to slab as possible while pouring; do not scrape pan. If preferred, pour the

sirup upon a white platter wet with cold water. If crystals form on top of candy, sprinkle with a few drops of cold water. Do not stir candy.

4. When candy is cool and a heavy wrinkle forms on top when platter is slightly tipped, beat hard with a spatula or wooden spoon, or possibly with a Dover beater in a bowl.

5. When candy is milky, not watery white, and beginning to lump, add flavoring and knead with the hands on a marble slab or wooden board until candy is very creamy; the more kneading, the whiter, creamier, and more glossy the candy. The best fondant hardens slowly.

6. Mold fondant at once into shapes for chocolate creams and other derivatives, or preferably place fondant in a covered glass jar and let it stand 24 hr. in a cool place before molding. (Avoid a refrigerator, else the fondant may become too moist on the outside.)

Notes:

1. If tightly covered, fondant can be kept for weeks or months before being molded; as a general rule, age improves the texture.

2. Glucose may be substituted for cream of tartar. Note the following class recipe:

- 1 c. sugar
- 2 tb. corn sirup (brown or white)
- $\frac{1}{3}$ - $\frac{1}{2}$ c. water

The Karo book gives the following recipe for Karo fondant, to be boiled to the threading stage:

- $\frac{1}{2}$ c. Karo corn sirup
- $1\frac{1}{2}$ c. sugar
- $\frac{1}{4}$ t. cream of tartar
- $\frac{1}{3}$ c. hot water

The better the facilities for beating fondant, the larger the percentage of glucose which can be used in making it; factory machinery makes possible a fondant of greater glucose content than that made in the home or school.

3. A great deal of commercial candy (including fondant and many other kinds) contains little, if any, sugar; it is made chiefly of glucose.

4. "Cane sugar crystallizes readily and in large crystals from a concentrated cane sugar solution. Glucose is crystallized with great difficulty, and the crystals formed from a concentrated glucose solution are extremely fine.

"The presence of glucose in a cane sugar solution prevents or retards crystallization and decidedly modifies the kind of crystals formed. When sufficient glucose is added to a concentrated cane sugar solution and the solution is made to crystallize, instead of the large cane sugar crystals, *very fine crystals are formed and the mixture has a creamy consistency.* This fact is fundamental to the making of certain frostings and candies.

"When cane sugar is cooked with an acid, it is gradually changed to glucose and fructose. The amount of glucose and fructose produced depends on the amount of acid used and the length of time required to concentrate the solution."¹

¹Katherine H. Mills, *Making Cake*, Part II (Cornell Reading-Courses).

DRIED, OR DEHYDRATED, FOODS

CLASSIFICATION

I. Protein foods:

Eggs

Fish

Legumes, mature (such as beans, peas, and lentils)

Meats

Milk:

Common

Malted

II. Carbohydrate foods:

Fruits (for use in sauce, pie, shortcake, jelly, etc.):

Apples

Prunes

Apricots

Raspberries

Cranberries

Rhubarb

Figs

Raisins (black or sultana)

Peaches

Strawberries

Pears

Etc.

Vegetables:

Beans, string

Cabbages

Carrots

Corn

Eggplants

Julienne (a mixture of carrots and other soup vegetables)

Onions

Peas

Potatoes

Pumpkins

Spinach

Tomatoes

Etc.

Notes:

1. Dried foods are especially useful in camp cooking.
2. Which of the dehydrated foods have the highest caloric value?
3. Pupil to make possible additions to the lists given in the classification.
4. See *Food Economy*, pages 11-16, for directions for the drying of foods.
5. Typical recipes for the use of dried foods are given on the succeeding pages.

BOILED LEGUMES

A camp dinner

Boiled beans

Stewed tomatoes

Fruit cobbler

Baked potatoes

Corn bread

Coffee

Boiled Beans

Method:

1. Pick over and wash dried beans, such as navy, kidney, lima, or pinto.
2. Soak them over night in cold water or stock to cover.
3. Add one of the following meats:

Bacon ends

Ham ends or a ham bone

Salt pork (such as the shank)

4. Cover and simmer 3-5 hr., or until the beans are tender. Cook in a fireless cooker, if preferred.

5. To every cup of cooked beans add the following seasonings (vary these, if desired):

$\frac{1}{3}$ - $\frac{1}{2}$ c. tomatoes

Salt and pepper

2 t. drippings

1 t. each of chopped celery, onion, green pepper, and red pepper

Brown the chopped vegetables in the drippings.

6. Cook the mixture 5-15 min., garnish with parsley, and serve.

Notes:

1. This recipe is an excellent one for the use of left-overs.
2. Peas, lentils, or peanuts may be substituted for beans.
3. A good dish consists of the following, heated together:
 - 1 c. split peas, mashed
 - 1 c. boiled carrots, cut in dice
 - Salt and pepper
 - Cream to moisten
4. Any of the legumes are good creamed as follows:
 - a. Boil them in water until tender.
 - b. Drain, and add any of the following:
 - Cream sauce
 - Cream or milk
 - Condensed milk
 - c. Cook mixture 20-30 min., and add salt and pepper.

5. Tomatoes, onions, cheese, and fat salt pork are among the "first aids" for giving flavor to legumes used in various recipes.

6. As a rule, lima beans cook more quickly than other beans.

7. It is difficult to boil legumes and other foods at a high altitude. Why?

8. Note the following points in regard to the skins of dried legumes:

a. In many cases the skins are an excellent source of bulk in the diet; in some cases the skins act as a digestive irritant, hence they should be removed.

b. Split peas have no skins. Lentils possess less skin than most beans.

c. More of the protein of beans is digested if the skins are removed;¹ therefore it is an economy to remove the skins.

9. The following statements are true in the majority of cases:

a. Dried legumes, including the skins, are excellent foods for hard-working men.

b. Dried legumes, minus the skins (see use of purées, etc.), are safer than unstrained legumes for use in the diet of any of the following:

Persons of sedentary habits

Persons of delicate digestion, such as:

Old people

Young children

Invalids

"There is almost no dietary in which legumes may not profitably find a place."²

Succotash

(A derivative of boiled beans)

Ingredients:

2 c. dried corn

2 c. dried beans (such as lima or kidney)

2 tb. $\frac{1}{4}$ " dice cut from fat salt pork

$1\frac{1}{4}$ c. milk or cream

2 tb. butter

$\frac{1}{2}$ t. salt

Pepper

Thickening paste, if desired:

1 tb. flour

1 tb. tepid or cold water

Method:

1. Soak the corn and beans in separate pans in cold water over night.

2. Add 1 tb. pork dice to each pan, and simmer the vegetables in these separate pans 1-5 hr., or until they are tender.

3. Mix the vegetables with all the other ingredients, simmer mixture 5-10 min., and serve.

Notes:

1. Succotash may also be prepared from canned or fresh vegetables.

2. Tomato juice is a good additional seasoning.

¹ See *Bulletin 74*, University of Minnesota Agricultural Experiment Station, by Snyder.

² *Farmers' Bulletin 121*, U.S. Dept. of Agri., "Beans, Peas, and Other Legumes as Food."

DRIED-LEGUME SOUPS

A camp dinner

Tamales

Bean soup
Baked potatoes
Lemon-jello with figs and raisins

Bread and butter

Soup Prepared from Legume Pulp

Ingredients:

1 tb.	1 c. legume pulp (see Notes 2, 3, 4, and 5)
$\frac{1}{4}$ t.	1-2 tb. fat (such as bacon drippings)
dash	Seasonings to taste, such as:
	Salt (about $\frac{1}{4}$ t.)
	Pepper
	Celery salt
	Tomato juice
	Onion juice
	Etc.
2 tb.	1 c. liquid, or enough to make a soup of the consistency of thin cream, selected singly or in any combination from the following (see Note 1):
	Milk or cream
	Water
	Tomatoes, strained
	Stock, meat
	Stock, vegetable
	Etc.

Method:

1. Simmer together 5-10 min. all the ingredients except the fat.
2. Add fat, garnish with paprika (and a little whipped cream, if desired), and serve.

Note:

1. If less liquid than the recipe calls for is used, a purée, or very thick soup, results.
2. Use any of the following dried legumes in preparing the pulp (combinations are often desirable, such as beans and lentils):

Beans (black, pinto, kidney, lima, navy, soy, etc.)
Peas, split or whole (green or yellow)
Peanuts (raw)

Lentils:

- a. Red, or Egyptian (smaller than the European)
- b. Olive-colored, or European

3. Prepare the pulp in the following way:

- a. Pick over dried legumes, wash, and soak them over night in cold water to cover.
- b. Drain legumes, add fresh cold water, and parboil legumes 5 min.
- c. Drain, add stock or water to cover, and boil 1-3 hr., or until legumes are tender.
- d. Press legumes through a sieve.

If desired, a little of any of the following ingredients may be mixed with the legumes before boiling (an extra flavor is obtained by previous sautéing of the vegetables in a little fat):

Bay leaf
 Carrot, chopped
 Celery (seed, fresh or dried leaves, or chopped stalk or root)
 Cloves
 Onion
 Parsley
 Potato
 Turnip
 Ham bones
 Pork, fat, salt

} chopped

Some cooks prefer to submit the legumes to long, slow cooking in any low-temperature apparatus, such as a fireless cooker. One author asserts that they are brought to perfection in the Atkinson cooker.

4. The pulp may also be prepared from canned legumes, or from left-over material, such as baked beans.

5. Certain legumes, such as soy beans and peanuts, are less rich in starch than others, hence a small quantity of flour is often desirable as a binding agent in preparing soups from them. It is well in certain cases to add the following starchy materials in place of flour:

Cooked rice or barley
 Cooked macaroni or other flour paste
 Broken crackers
 Soft bread crumbs

Soup Prepared from Legume Powder

Ingredients:

1 t.	1-2 tb. legume powder (such as bean, pea, or lentil)
2 t.	2 tb. cold water
$\frac{1}{3}$ c.	1 c. boiling water or stock
dash	Celery salt
1 tb.	3-6 tb. cream (or milk and butter)
dash	Salt and pepper

Method:

1. Blend the powder with the cold water to make a smooth paste.
2. Add the paste to boiling water and boil 15-20 min.
3. Add other ingredients, bring to the boiling point, and serve.

Notes:

1. This soup is convenient for camp and quick lunches generally.
2. The cream (or milk and butter) is optional, and is often omitted. Dried or condensed milk may be used in camp.
3. Various additional seasonings may be used, such as parsley, thyme, celery, bay leaf, etc.

"Sausage" and other powdered soups are often seasoned at the factory, hence it is often required that a housekeeper add no seasonings to powdered soups.

4. Legume powder is sold packed in any of the following receptacles:

- a. Cardboard or tin boxes

- b. Sausage-like cases. Some sausage powders (selling at about \$0.25 per $\frac{1}{2}$ lb.), such as Erbswurst, consist of a mixture of legumes, and are much used in military camps. Note various uses of Erbswurst, according to the quantity of water added:

Soup (much water added)

Porridge or gruel (less water added)

Sautéed or fried cakes (very little water added)

MISCELLANEOUS DRIED-FOOD RECIPES¹

Scrambled Eggs

Method:

1. Add cold water to dried eggs (a powder) to make a liquid of the consistency of ordinary eggs.
2. Add condensed milk, salt, and pepper, and proceed as for regular scrambled eggs.

Dried-Fruit Pie

Method:

1. Wash figs or any of the other dried fruits.
2. Soak fruit over night, then stew it until it is tender, adding sugar, if needed. If desired, add cinnamon or nutmeg, lemon juice or grated rind, etc.
3. Use this sauce as filling for an ordinary pie.

Note:

In camp cooking, it is sometimes a convenience to use bacon or other drippings in the crust.

Dried-Fruit Jelly

Method:

1. Prepare a sauce as follows:
 - a. Wash any tart dried fruit, such as apples or cranberries, and soak them over night in water to cover.
 - b. Simmer them in this same water until they are tender and plump, then remove fruit from the sirup.
2. Prepare jelly, as follows, from the sirup:
 - a. Mix $\frac{3}{4}$ -1 lb. of sugar with the sirup (about 1 qt.) from 1 lb. of fruit.
 - b. Boil mixture to the jelly stage, and pour it into molds to set.

Creamed Spinach

Method:

1. Soak dried spinach, then boil it about 30 min., or until it is tender.
2. Add cream, salt, and pepper, and serve on toast.

¹Let the pupils make a collection of camp recipes from magazines, etc. *Camp Cookery*, Oregon Argicultural College, by Milam and Smith, has been helpful in the preparation of certain recipes in *Diet for Adults*.

COFFEE¹

Boiled Coffee

Ingredients:

(1 c. coffee)

2 level tb., or 1 rounded tb., medium-ground coffee
1 c. cold water

Method:

1. Mix the two ingredients in a scalded pot, place over a low flame, and bring gradually to the boiling point.
2. Boil gently 3-5 min., then remove the pot from the fire.
3. Add 1 tb. cold water through the spout, stir down the coffee, and stuff the spout with soft paper. Let the coffee stand 5-10 min. in a hot place so as to settle; do not allow it to bubble.
4. Pour coffee from the grounds at once, and serve.

Notes:

1. If desired, $\frac{1}{2}$ t. beaten egg may be used as an additional clearing agent; mix the coffee to a paste with the egg and 1 tb. cold water, then add the remainder of water. (Explain the action of egg and cold water as clearing agents.)
2. One cup boiling water may be added to the coffee in place of 1 c. cold water. However, some authorities give preference to the use of cold water.
3. Some cooks boil the coffee in a muslin or a thin flannel bag.
4. A coffee pot possessing a lip with a lid is more desirable than a pot with a spout, because of the volatile nature of coffee.
5. Boiled coffee is said to be done when a wooden spoon comes out free from grounds after being thrust into the coffee; the coffee is not done if the grounds stick to the spoon.

Percolated Coffee

Ingredients:

Finely ground (but not pulverized) coffee
Water

Method:

Follow the directions furnished by the manufacturer of the percolator used. The average time allowed for percolation is 10-15 min.

¹The author does not wish to imply that coffee has high caloric value. Coffee is a stimulant. It has almost no caloric value unless sugar and cream or milk are added. Coffee is included in this section of the book simply for the reason that in hearty diet, if anywhere, it has a legitimate use. Its warmth is especially appreciated by outdoor workers, such as firemen and lumbermen.

Notes:

1. Pupil to diagram the chief parts of the average percolator, as follows:
 - a. Large receptacle below for the water
 - b. Globe or cup (with a sieve-bottom) for the coffee grounds
 - c. Tube and spreader plate
 - d. Heat attachment (electric, alcohol, etc.)
2. Water and steam are forced up continuously through the central tube; pupil to explain this action. The water and steam spray over the coffee (see spreader plate), and the water percolates through it.

Filtered Coffee

(Often called drip, or French, coffee)

Ingredients:

(1 cup coffee)

- 2 level tb., or 1 rounded tb., pulverized coffee (as fine as flour)
- 1 c. violently boiling water

Method:

If a French drip coffee pot, or biggin, is not available for filtering coffee, filter it as follows:

1. Stretch a piece of fine muslin loosely over the top of a hot scalded pitcher or an open china teapot, kept just for coffee.
2. Place the coffee in the depression in the cloth and slowly pour the boiling water through it.
3. Remove the cloth, cover the utensil, and serve the coffee at once.

Notes:

1. Experts have decided that filtration is the best method for making coffee. Consult the following articles: "The Best Method for Making Coffee," *Journal of Home Economics*, December, 1914; "How to Make Coffee," *Good Housekeeping*, March, 1914.
2. This method is especially popular in the preparation of "black," or after-dinner (demi-tasse), coffee—a beverage made about twice as strong as ordinary coffee.
3. If the water is poured through the coffee more than once, a darker beverage results, but one of less delicate flavor.
4. Wash the cloth immediately after using, and keep it in a jar of cold water; do not allow it to dry. Change the water daily.

Miscellaneous Notes on Coffee**1. Cautions:**

- a. Buy unground coffee and grind it daily just before using it. This is an essential point, since ground coffee loses its flavor on standing, even when kept in tin cans and for a very short time.
- b. Avoid tin coffee (or tea) pots. Why?
- c. Do not cook coffee too long, else it will turn bitter owing to the extraction of excess tannin.
- d. Remove coffee grounds at once from any coffee pot, then wash the pot with scalding-hot soft water, rinse, dry, and air. Let the pot stand in the cupboard with the cover off.

2. An excellent way to tell when coffee is done is to pour a little into a cup and note the color, clearness, and odor. Undercooked coffee has a distinctive aroma.
3. A dash of salt is a desirable addition to any coffee.
4. Café au lait is prepared by filling the cups half full of scalded milk, then adding coffee.
5. The delicious flavor and fragrance of coffee are due to the presence of volatile oils; the stimulating effect of coffee is due to caffeine.
6. Note the following commercial products:
 - a. Coffees from which the manufacturers claim to have extracted more or less of the caffeine (What can you say about the stimulating properties of such coffees?)
 - b. Concentrated coffee powders, such as the G. Washington brand
 - c. Liquid extracts of coffee
7. Coffee powders and extracts and boiled coffee are useful in camp cooking; percolated and filtered coffees are seldom practical for camp use.
8. Pupil, by tests, to determine the most economical way to make coffee.

SANDWICHES¹

(Optional lesson)

CLASSIFICATION OF SANDWICH FILLINGS

I. Fillings chiefly protein in nature:

1. Egg fillings (see Note 4):

Egg, ground boiled ham (equal parts)
Egg, bacon
Egg, cooked spinach, mayonnaise
Egg, celery, mayonnaise
Egg, mayonnaise (beaten together until creamy)

2. Cheese fillings (see Note 5):

Cheese, lettuce, mustard, mayonnaise

Cream cheese mixed with any of the following:

Chili sauce	Pecans, orange
Marmalade	Pimentos, lettuce
Nuts, lettuce	Pimentos, tomato slices
Nuts, raisins	Pineapple
Olives or sweet green pepper	Etc.

3. Dried-legume fillings:

Peanuts or peanut butter
Peanut butter, tomato slices
1 c. mashed baked beans, 2 t. chili sauce, 1-2 tb. mayonnaise

4. Nut fillings:

Nut butter (such as almond or pecan)
Nuts, chopped

5. Meat fillings (see Note 6):

Bacon or ham
Baked ham, boiled tongue, cooked salad dressing
Beef (such as steak)
Bologna sausage (ground), white sauce
Chicken or other poultry
Chicken liver
Corned beef
Tongue
Veal

¹Sandwiches are useful in semi-hearty and light diets as well as in hearty diet. This chapter on sandwiches is placed under hearty diet for the simple reason that the majority of the sandwich fillings listed seem more suitable for use in hearty diet. The lists of sandwich fillings offer suggestions for picnics, afternoon teas, and various other occasions in adult life.

6. Fish fillings (see Note 6):

Anchovies, olives
 Caviar, lemon juice
 Crab meat, cucumbers, celery, mayonnaise
 Oysters (fried), lettuce, mayonnaise
 Salmon, pickle
 Sardines (boned), lemon juice
 Shrimps, mayonnaise
 Tuna, pickle, mayonnaise

II. *Fillings chiefly carbohydrate in nature:*

1. Salad fillings (see Note 7):

Beets, lettuce, French dressing
 Celery, almonds, mayonnaise
 Celery, olives, nuts, apples, mayonnaise
 Cucumber, chives, French dressing
 Dill pickle, cooked salad dressing
 Lettuce (or endive or water cress), mayonnaise or French dressing
 Nasturtium seeds, French dressing
 Onions, cucumbers, cooked dressing
 Onions (Spanish), French dressing

2. Sweet fillings (see Note 8):

Fruit butter (see recipe, *Food Economy*, page 32)
 Jelly, jam, marmalade, or preserves
 Fruit-nut paste (see *Diet for Children*)
 Caramel sirup, honey, or orange honey
 Orange slices, lemon gelatin jelly, nuts as garnish

Notes:

1. Various combinations of the foregoing fillings are possible.
2. Cream or salad dressing is an addition to almost all of the non-sweet fillings.
3. The use of protein-food fillings results in complete-dish sandwiches.
4. *Egg fillings:* Use eggs in the shell, or scrambled, or sautéed eggs. Slice or chop the eggs, and mix them with salad dressing and any other ingredients indicated.
5. *Cheese fillings:* Slice Swiss and other hard cheeses; beat cream and all other soft cheeses to a paste. Cream-cheese fillings are good combined with either white or Boston brown bread; French dressing is a good addition to such fillings. (Cream cheese is sold either plain or mixed with pimentos or sweet green peppers.)
6. *Meat and fish fillings:* In general, mince the meat or slice it very thin across grain; prepare the fish in flakes or mix it to a paste with salad dressing.

A list of possible additions to meat and fish fillings is as follows (mix these additions with either the dressing or the filling proper):

Salad greens (cress, lettuce, etc.)

Vegetables, minced or sliced:

Cabbage	Parsley
Celery	Peppers, sweet green or red
Cucumbers	Pickles
Olives (any kind)	Pimentos
Onions	Tomatoes

Sauces:

Caper	Mint
Catsup	Mustard
Chili	Salad dressing (any kind)
Horse-radish	Tomato
Lemon juice	Worcestershire

Caper, catsup, tomato, and mint sauces are especially good with lamb.

The following seasonings are popular with fish:

Lemon juice
Onion juice
Parsley, chopped

7. *Salad fillings*: Chili sauce or chopped tomato is a good addition to any of these fillings. Chop celery, apples, nuts, olives, onions, chives, and pickles for use in salad fillings; either chop or slice cucumbers and pickled beets. For further suggestions for salad fillings, see pages 155-179.

8. *Sweet fillings*: Fruit butter, conserve, etc., prepared from dried fruits, such as the following, are especially good as sandwich fillings:

Apricots	Figs
Cranberries	Prunes
Dates	Raisins

Certain combinations of fruits are particularly desirable, such as fig and date, also prune and date or fig.

The following ingredients are often a part of filling (raw or cooked) prepared from either dried or fresh fruits:

Cream, plain or whipped	Nuts, chopped (good with dates)
Lemon juice	Sugar

A mixture of $\frac{1}{3}$ c. chopped preserved ginger and 1 c. chopped English walnut meats makes a good filling.

Note a simple way to prepare fig filling:

- a. Soak figs over night, then stew or steam them until they are very tender.
- b. Grind the figs in a food-grinder or press them through a coarse sieve.
- c. Add a little lemon juice to the paste; add sugar, if desired.

Dates (raw or cooked) chopped to a pulp make an excellent filling by themselves or in combination with certain cooked fruits.

GENERAL METHOD FOR SANDWICHES

1. Cut any of the following breads (see Note 1) into even slices, using a very sharp knife so as to avoid ragged slices:

Boston brown	Rye
Bran	White (wheat)
Graham	Whole wheat
Oatmeal	Etc.

Cut the bread thin for persons of delicate appetite and for formal occasions; cut the bread thicker for picnickers and others with a hearty appetite.

If desired, trim the slices neatly so as to remove the crusts. (Less waste results if crust is cut from loaf before the loaf is sliced; see Note 5.)

2. For each sandwich secure two slices of bread which fit together exactly, that is, secure adjoining slices.

3. Soften, or cream, the butter by beating it with a spoon (hard butter is difficult to spread).

4. Spread butter evenly over the entire surface of each slice, being careful not to neglect the edges (see Notes 2 and 3).

5. Spread filling (if used) on but one slice of each sandwich (see Note 6, *b*).

6. Press sandwiches hard so that the slices will not fall apart when sandwiches are served.

7. If desired, cut the sandwiches into smaller sandwiches, such as triangles, squares, and strips. Sandwiches for afternoon tea should be cut very small.

8. Pile sandwiches on a plate in an attractive fashion (such as log-cabin for strip sandwiches). A doily or a lettuce leaf may be placed beneath the sandwiches.

9. Garnish sandwiches with any of the following, then serve:

Pickles, such as dill

Lemon slices

Greens (such as celery tips, cress, and parsley)

Notes:

1. Note points regarding bread for use in sandwiches:

a. It should be in well-shaped loaves. The bread may be baked in ordinary bread tins, in sandwich-loaf tins, or in baking-powder cans.

b. It should be a day old, at least, except for roll sandwiches; fresh bread does not slice well. Bread that is too old crumbles while being sliced; a fine-grained bread crumbles less easily than a coarse-grained bread.

c. Nuts and raisins are often a desirable addition to any of the breads listed in step 1 of the method.

2. A flavored butter (such as mint) is sometimes substituted for plain dairy butter. If peanut or almond butter is used as a filling, dairy butter may be omitted. (Why?)

3. A soaked and unappetizing sandwich usually results if one slice of bread only is buttered; butter prevents absorption of the filling by the bread.

4. If sandwiches are to be stored for any length of time, keep them moist (*a*) by wrapping them in wax paper, then in a damp napkin, and (*b*) by keeping them cool. The wrapping prevents the absorption of flavors, as well as keeps the sandwiches moist. (Paper is often omitted, a damp napkin only being used.) Note that butter tends to keep bread moist.

5. Note a very simple method for making sandwiches:

a. Trim all the crust from a loaf of bread.

b. Cut the loaf lengthwise in slices, and butter each slice.

c. Fit adjoining slices together so as to make long "sandwiches," add any filling desired, and press slices well together.

d. Cut these long sandwiches into any forms desired, such as:

Rounds

Squares and other rectangles

Triangles

6. Sometimes certain of the following variations of the general method may be advisable:
- a.* Butter each slice before it is cut from the loaf; that is, butter the end of the loaf each time.
 - b.* Mix butter and filling so that the one spreading does for both.
 - c.* Substitute toast, rolls, or baking-powder biscuits (large or small) for bread.
Prepare a sandwich from a roll as follows:
 - (1) Cut a slice from the top of a roll and remove the crumbs.
 - (2) Butter the inside of the shell and fill it with sandwich filling.
 - (3) Replace cover.Use very small biscuits for sandwiches for afternoon tea; split them, add filling, and serve slightly warm or cold.
 - d.* Prepare an "open" sandwich by spreading one slice of bread with butter and filling. Serve an open sandwich with a fork.

PART III
LIGHT DIET

SUGGESTIONS FOR LESSONS

FRUIT RELISHES

25. Various recipes for fruit relishes

SOUPS

26. Fruit soups (cold or hot)
27. Hot vegetable soups, such as tomato bouillon
28. Cold meat soups: (a) meat jelly served in cubes; (b) iced broth

PROTEIN-FOOD DISHES

29. Broiled fish with Hollandaise sauce
30. Meat or other savory soufflé
31. Foamy omelet

VEGETABLES

32. Boiled peas, corn, asparagus, or string beans, served (a) with butter, (b) with white sauce
33. Boiled cabbage or onions—escaloped. (Preparation of cream soups from the strong-flavored water remaining)
34. Corn chowder

SALADS

35. Combination or other appetizer salad. French dressing. Cheese crackers. Fruit or other carbohydrate salad
36. Fish or other protein-food salad. Rice and hard-cooked eggs, or other complete-dish salad. Cooked dressings (various types)

DESSERTS AND BEVERAGES

37. Popovers (stuffed). Cream puffs
38. Sponge cake. Angel cake
39. Whips (choice of the four kinds)
40. Iced beverages, such as tea and lemonade

FRUIT RELISHES

A hot-weather dinner

Roast chicken

Buttered carrots

Fruit relish

Cup custard

Creamed potatoes

Bread and butter

Combinations for Fruit Relishes, or Appetizers

1. Oranges and bananas
2. Oranges, bananas, pineapple, peaches, and strawberries or raspberries
3. Strawberries or pineapple and juice of sweet oranges
4. Fresh figs cut in small cubes, sections of orange or grapefruit, and lemon or orange juice
5. Cubes of alligator pear, slices of orange or grapefruit, and lemon or other acid fruit juice
6. Small cubes or balls of muskmelon or watermelon
7. Kumquats, sliced, and lemon juice
8. 4 oranges cut in cubes, 1 pineapple cut in cubes, 2 tb. finely chopped mint, 1 tb. lemon juice, 1 tb. pineapple juice, 4 tb. powdered sugar, a sprig of mint as garnish
9. 1 c. sliced orange, 1 c. sliced grapefruit, 1 c. red or green California grapes (any other fresh fruits, such as strawberries, may be substituted for these three fruits)
10. Grapefruit pulp, served alone or mixed with fresh orange or any other fresh or preserved fruit
11. Watermelon prepared in a circular series of wedge-shaped slices like orange sections

Notes:

1. Almost any number of other combinations is possible. A good cherry relish is made of pitted ripe, red cherries which are covered with a thick layer of sugar and allowed to stand over night in the refrigerator. (Define plasmolysis. See dictionary.)

2. The following, when not specified, are understood in all the foregoing recipes:

Acid fruit juice to taste (orange, lemon, lime, or grapefruit juice)

Sugar to taste

Sugar is usually, but not always, required; powdered sugar, which is often used, may be sprinkled on the fruit just before it is served.

3. Marshmallows, cut in $\frac{1}{4}$ " cubes and mixed with the fruit, are sometimes good in a fruit relish.

4. A fruit relish is much used as the first course of a dinner or a luncheon, especially in hot weather. (Pupil to discuss relishes, other than fruit, which are also used as "beginnings," such as canapés and raw oysters. See standard cookbooks.)

5. A serving of fruit or any other kind of "beginning relish" should be very small in quantity. If the size of the serving is increased, a fruit relish may often be served as the first course of a breakfast or as a dessert; in such a case, however, the term "relish" is dropped.

Note four suggestions for fruits served in fruit cups or baskets:

- a. Pineapple cup filled with strawberries, pineapple, or any other fruit
- b. Apple cups, prepared from unpared red apples, and filled with almost any fruit
- c. Shell of half a muskmelon filled with any fruit, such as:
 Cubes or tiny balls of muskmelon, watermelon, pear, etc.
 Strawberries or red raspberries
 Sprinkle with sugar and add shaved ice.
- d. Orange, lemon, or grapefruit basket or cup filled with any fruit (prepare the cup from $\frac{1}{2}$ – $\frac{3}{4}$ of the rind in each case, forming saw-toothed edges with a knife or shears, if desired)

Pupil to discuss the following points with regard to the four fruit cups: Which are better served as relishes? Which are in too large servings for relishes and hence better served as breakfast courses or as desserts? Which may be served either as relishes or as breakfast courses or as desserts?

Strawberries in small Swedish timbale cases are sometimes served as a dinner relish. If desired, place the berries in the timbale without hulling them, and place a very small mold of powdered sugar on the plate beside the timbale. (The berries are to be dipped into the sugar by means of the hulls.)

6. Oranges, grapefruit, and melons (such as muskmelons), cut in halves and served with little or no further preparation, are sometimes served as relishes, but the servings are usually too large for use as relishes.

The following is an excellent method for preparing orange or grapefruit (allow half a fruit for each serving):

- a. Cut fruit in halves, crosswise of sections, or carpels.
- b. Using any sharp-pointed knife or a special knife with a curved point, cut around the pulp in each section, so that later it can easily be removed with a spoon.
- c. Using scissors or the knife, remove seeds and all the white skin from center of fruit.
- d. Add 2–3 tb. sugar and let fruit stand in refrigerator several hours or over night.
- e. Garnish center and edge with whole or half strawberries, cherries, grapes, etc. Add ice, if desired.

Note another good method:

- a. Scoop all the fruit from the half rind.
- b. Remove the membrane from each of the sections, keeping their shape intact or not, as desired.
- c. Mix the pulp with sugar, and replace it in the half rind.

7. Certain types of fruit salads and of fruit desserts (see Note 5) are similar to fruit relishes. Note the following points regarding the three groups of dishes:

- a. They contain the same ingredients, with the following exceptions:
 Nuts: These are too hearty a food for use in relishes, but are often used in fruit salads and desserts.
 Acid: Mayonnaise or some other acid ingredient is usually included in the salads, but it is not used in the relishes or desserts.
- b. They offer opportunity for the use of left-over fruits.
- c. Tough and inedible materials (seeds, etc.) should be avoided in the three groups.

GENERAL METHOD FOR FRUIT RELISHES**1. Prepare fresh fruit in any of the following forms:**

- a.* Slices
- b.* Small cubes or balls (use French vegetable-cutter for the balls):
 - Apples
 - Bananas
 - Muskmelons
 - Peaches
 - Pears, alligator
 - Pears, common
 - Pineapples
 - Watermelon
- c.* Sections, or carpels:
 - Grapefruit
 - Oranges (blood oranges are especially pretty)
 - Tangerines
- d.* Whole fruit or halves:
 - Cherries
 - Grapes, seeded (white or red California)
 - Strawberries

2. Mix the fruit with sugar and acid fruit juice to taste (see Note 2, page 121), and chill.

3. Serve in any of the following receptacles, as a rule adding shaved ice just before serving:

- a.* Fruit cup (such as orange, apple, or pineapple), placed on a small service plate
- b.* A tall-stemmed glass, placed on a doily on a small service plate
- c.* Comport, or double goblet: Place the fruit in a small stemless goblet, then set this small goblet in a larger one partially filled with finely shaved ice.

4. Garnish with any of the following:

- a.* Fresh fruits, prepared in any of the forms listed in step 1. Two or three seeds of pomegranate may also be used for their color effect.
- b.* Preserved fruits, nuts, and roots:
 - Bar-le-duc
 - Cherries
 - Chestnuts
 - Ginger
 - Kumquats
 - Strawberries
- c.* Fruit which has been boiled in grape juice or a colored sirup made with equal parts of sugar and water (Cubes of pear or apple are pretty boiled in a red sirup, with geranium leaves as a possible flavoring for the sirup.)

- d.* Candied foods, chopped or finely shredded (such as angelica or cherries)
- e.* Grape or other fruit juice or jelly (occasionally added for color effect)
- f.* Cubes of mint or other gelatin jelly
- g.* Marshmallows, cut in $\frac{1}{4}$ " cubes
- h.* Orange or lemon ice
- i.* A rose or other single flower, often placed on the service plate (The color of the flower should harmonize with the color of the fruits. Smilax is also sometimes used as a garnish.)

Notes:

1. Much of the method applies to fruit salads as well. Note that a fruit relish is served in a glass, a fruit salad on a salad plate; a spoon or fork is used in the former case, a fork in the latter.
2. When a relish is served in either a single glass or a comport, the guest's napkin may be placed either on the tablecloth at left of plate or on the service plate under the glass.
3. Any one of the following is a possible substitute for sugar in a relish:
 - Corn sirup, white
 - Sugar sirup (a convenience, if kept on hand)
 - Honey

SOUPS

FRUIT SOUPS

A summer luncheon

Fruit soup

Wafers

Potato and green-pea salad
Cream-cheese and olive sandwiches
Angel cake

Fruit Soup

Ingredients:

(4 servings in bouillon cups)

¼ t.	1 tb. arrowroot (see Note 3)
1 t.	1½ tb. cold water
dash	A little grated rind of lemon
spk.	Bit of stick cinnamon
spk.	Dash of salt
3 tb.	1 c. boiling water
1 tb.	1 c. pure strained fruit juice of any kind except lemon
½-1 t.	Sugar to taste (about 2-3 tb.)

Method:

1. Mix the arrowroot with cold water to make a smooth paste.
2. Add paste, rind, spice, and salt to the boiling water, and simmer 2-5 min., or until the liquid is clear, or "transparent."
3. Remove from fire, add the fruit juice and sugar, stir to dissolve the sugar, strain, and chill.
4. Pour soup into bouillon cups, and add a little chipped ice to each cup.
5. Garnish with any of the following:

Cherries
Cloves (for example, in slices of lemon)
Grape halves
Orange or lemon slices
Pineapple cubes
Raspberries
Strawberries
Etc.

6. Serve with any of the following:

Crackers, plain sweet
Crackers or bread, toasted, either plain or sprinkled with sugar
Macaroons
Zwieback

Notes:

1. Almost any fruits may be used singly or in any combination in fruit soup, such as:

a. Fresh fruits (raw, freshly stewed, or canned):

Apples	Gooseberries	Raspberries:
Blackberries	Grapes	Black
Blueberries	Oranges	Red
Cherries	Peaches	Yellow
Cranberries	Pears	Rhubarb
Currants	Pineapple	Strawberries
Elderberries, with grapes	Plums	Tangerines

Sour black pie-cherries are particularly good.

Soup made from the small red apples, or fruit, of the wild rose is said to be delicious and is very popular in Sweden.

With oranges and many other raw fruits it is possible to secure the pure juice by pressure only. In the case of hard raw fruits (such as apples, plums, pineapple, etc.), chop fruit and simmer it in water barely to cover until fruit is very soft. Drain through a jelly bag or fine sieve; avoid using the pulp, else the soup will be cloudy.

b. Dried fruits (stewed after soaking over night):

Apples
Apricots
Cranberries
Prunes
Raisins

Usually a mixture of fruits is used.

No sugar is added, as a rule.

Note the possible value of dried-fruit soups to the camper.

The following, if not too sweet, are often of use in the preparation of fruit soups:

Canned fruit juices (such as grape)

Jellies and jams

2. Vary the proportions of water and other ingredients in the general recipe in any way desired; for instance, omit all the sugar or thickening in certain cases. Make the soup taste good. Soup is sometimes made from pure fruit juice, undiluted with water. A little lemon juice usually is an addition to any kind of fruit soup, but is especially desirable in the case of dried fruits. Beware of cooking lemon and some other fruit juices at too high a temperature, else their flavor may be reduced or altered. Pits of fruit (cherry, prune, etc.) are sometimes utilized for flavor; crack the pits, add a little water, bring it to the boiling point, then strain the liquid into the soup. Ground cinnamon or cloves are sometimes added.

3. Note possible substitutes for arrowroot:

a. Sago or pearl tapioca, soaked in cold water

b. Dry minute tapioca (2 tb. of this may be substituted for 1 tb. arrowroot in the general recipe; soak the tapioca 5-10 min. in the fruit juice, then add the water and other ingredients and simmer until the tapioca is clear)

c. Cornstarch ($1\frac{1}{2}$ tb. of this may be substituted for 1 tb. arrowroot in the general recipe, but the resultant soup is cloudy, hence not attractive looking)

Occasionally egg yolk is used in addition to other thickening agents; add the hot soup to the yolk.

4. A fruit soup is sometimes served hot or medium cold, but usually it is served cold as the appetizer, or first course, of a luncheon or supper on a hot day, in which case it takes the place of grapefruit or other appetizer. A fruit soup is not stimulating as is a meat soup, but it is cooling and of use as an appetizer.

5. A fruit soup is sometimes served in a sherbet glass or a teacup.

6. Fruit soups are a valuable source of fruit acids for children and adults.

Possible uses of fruit soups are as follows:

In normal diets:

Spring or hot-weather diet

Diet for overweight

Etc.

In invalids' diets:

Diet for colds (soup is usually served hot)

Fever diet

Etc.

HOT VEGETABLE SOUPS

Luncheon

Tomato bouillon
Potato salad

Lemon sherbet

Wafers
Egg sandwiches

Recipes for a few hot soups of low caloric value are given below. (Soups of low caloric value also include certain of the cream-soup series; see *Diet for Children.*)

Tomato Bouillon

Ingredients:

¼ c.	4 c. stewed tomatoes
spk.	Seasonings for tomatoes (see Note 1):
¼ clove	¼ bay leaf
½ peppercorn	2 or 3 cloves
¼ t.	4-8 peppercorns
dash	2-4 t. sugar
½ t.	Salt and pepper (such as paprika)
¼ t.	2 tb. onion, chopped
2 tb.	1 tb. parsley, chopped
½ t.	1 c. water, stock, or water from boiled rice
½ t.	2 tb. butter or a substitute
	3 tb. flour or cornstarch

Method:

1. Add the seasonings to the tomatoes, cover, and simmer 15-20 min. (Simmer the class recipe 3-4 min. only.)
2. Strain the tomatoes, then add water to make up the original volume, 4 c.
3. To these highly seasoned tomatoes add the 1 c. water, stock, or rice water.
4. Stirring constantly, very slowly add the liquid to a flour and fat paste, then simmer the whole mixture 3-5 min.
5. Add more salt, if needed, and serve.

Notes:

1. If desired, omit part of the seasonings from the tomatoes. The presence of sugar is desirable if the tomatoes are very sour; sugar is added simply to counteract the acid taste, not to produce a sweet soup.
2. If the tomato mixture (after performing step 3) is very acid, add ⅛ t. soda (spk. in class recipe), and simmer the mixture 1-2 min., or until the froth disappears. But since cooking with an alkali destroys vitamins in foods, it would seem to be better, from this standpoint, to omit the soda.

Asparagus Broth**Method:**

1. Cut fresh or canned asparagus into 1" pieces.
2. Cover the vegetable with boiling water, cook it until very tender, then drain.
(Do not discard this water.)
3. Press all but the tips of the asparagus through a sieve.
4. Return pulp and tips to the water, and reheat.
5. Season with salt, pepper, and butter, and serve.

Vegetable-Rice Soup**Ingredients:**

- 2 tb. each chopped celery, onion, and carrots
- 1-2 tb. raw rice
- 3 c. boiling water
- 1 t. parsley, chopped
- 1 clove
- ½ tb. bacon or other drippings
- Salt and pepper
- 1 t. flour (not always necessary)

Method:

1. Cook the celery, onion, and carrots with the fat 10 min. without browning.
2. Mix the rice with all the other ingredients except the flour and parsley, cover, and boil 15-30 min., or until the rice is cooked to a pulp.
3. Add a flour paste, cook mixture 5 min. longer, add parsley, and serve.

Note:

Possible additions are as follows:

Bay leaf

Left-over meat

Left-over vegetables and rice

Water drained from boiled rice

Okra Soup**Ingredients:**

- 6 slices onion
- 8-10 okra pods, split lengthwise
- 1 qt. boiling salted water
- 2 c. milk
- 2 tb. cooked rice

Method:

1. Sauté the onion and okra in a little bacon fat until they are brown.
2. Add the water, and cook until vegetables are tender.
3. Add milk and rice and simmer 3-4 min.

Note:

If desired, add minced celery and sweet green pepper to the soup in the beginning, and add stewed tomatoes when the soup is about done.

COLD MEAT SOUPS

Luncheon

Meat-jelly cubes on ice	Lemon slices	Wafers
Sliced cold leg-of-lamb	Lettuce	Bread and butter
	Stewed cherries	

General Recipe for Meat Jelly

Ingredients:

Any meat cuts that are bony and cartilaginous, such as:

Knuckle of veal

Lower part of shin or shank of beef

Water barely to cover

Seasonings to taste

Method:

1. Clean meat, and chop or crush meat and bones in small pieces.
2. Add cold water barely to cover, put a tight lid on saucepan, and bring liquid slowly to the boiling point.
3. Simmer meat 3-8 hr., the time depending upon the quantity and the toughness of the meat; cook the meat to shreds, adding water from time to time to keep up the original volume. (If bones alone are used for making the jelly, they may be boiled, not simmered.)
4. Remove meat and bones, strain stock, and season to taste.
5. Pour stock into molds, set on ice over night, then remove any fat from the top.
6. Serve as the soup course of a dinner on a hot day. Cut the jelly into cubes or break into pieces with a spoon and serve in a bed of chipped ice or in bouillon cups.

Notes:

1. In case the given recipe is not stiff enough to cut into cubes, stiffen it by the addition of gelatin. Note that meat jelly is a rich form of broth solidified.

2. Note possible seasonings for meat jelly:

Salt

Salt, celery or onion

Pepper

Thyme and other herbs

Peppercorns

Vegetables:

Celery

Carrot

Onion

Parsley

Vegetables and peppercorns, if used, are usually simmered with the meat and bones for part of the time.

3. The following meats are generally used in the preparation of meat jellies:

Beef

Veal

Calves' feet (skin and clean them carefully)

Chicken (use a raw chicken, or the bones alone of a raw or cooked chicken)

4. If preferred, serve meat jelly as a relish. Such a dish is especially useful in invalids' diet. Turn out on lettuce a small mold of jelly, cut in cubes or not, as desired, and garnish with parsley and slices of lemon.

5. A jelly can be made by the addition of gelatin to beef tea.

Chicken Jelly

Ingredients:

(3-3½ c. jelly)

1½ lb. chicken (half an average chicken)

1 lb. neck of veal

1 lb. shoulder of beef, lean

2 qt. cold water

1 tb. salt

Method:

1. Using a cleaver and a knife, cut the three kinds of raw meat and bones into ½"-1" cubes.
2. Place chicken in a casserole or other earthen dish, add the water, cover tight, and simmer 5 hr. in an oven.
3. Remove cover, and simmer 1 hr. longer.
4. Dissolve the salt in the liquor.
5. Strain liquor through a fine sieve lined with double cheesecloth.
6. Pour liquor into small or large molds, chill over night, then remove any fat from the surface.
7. Turn jelly out, and serve either as soup or as a relish.

Iced Broth

Ingredients:

2 c. of one of the following broths:

Clam or oyster broth

Chicken, beef, or other meat broth (see Note 1)

½ tb. granulated gelatin (see Note 2)

2 tb. cold water

Seasonings to taste, such as:

Paprika or cayenne

Few drops of tarragon vinegar

Clear tomato juice

Ham cut in small cubes

Method:

1. Soak the gelatin 3-5 min. in the cold water.
2. Heat the broth to the boiling point, add all other ingredients, and chill.

3. Pour broth into bouillon cups, place a little chipped ice in the cups, and serve with hot, crisp saltines.

Notes:

1. A clear stock soup, such as consommé or bouillon (canned or freshly prepared), is very desirable. An ordinary meat broth, highly seasoned with the following, is also good:

Bay leaf
Carrots
Celery
Parsley

Note, however, that such a broth keeps better in hot weather if the vegetables are omitted.

2. The small quantity of gelatin used in this recipe does not thicken it, but simply gives it a little body. If preferred, enough gelatin may be used to yield a partially jellied soup.

3. If desired, the recipe may be partially frozen before being served — that is, frozen to the consistency of a frappé. A mixture of chicken and clam broths is good served in this way.

4. This soup is particularly good for use in hot-weather luncheons and suppers.

CLASSIFICATION OF SOUPS

This classification includes high-calorie as well as low-calorie soups.

I. Soups made with meat stock:

Meat jellies (see Note 3)	} made without milk or cream
Iced broth	
Hot soups:	
Simple broth	
Bouillon and consommé	
Heavy meat soups	

II. Soups made without meat stock:

Fruit soups (made without milk or cream)

III. Soups made with or without meat stock:

Cream soups, thin or thick (made without stock, as a rule)	} made without milk or cream, as a rule
Lentil or other dried-legume	
Vegetable soup, such as tomato bouillon	
Rice, noodle, or barley soup	

Notes:

1. Compare the food values of the various soups.

2. Meat soup stocks are named as follows, according to color:

Amber, or standard, stock (common broth)

Brown stock, the same as amber stock except for the use of some browning agent (Beef or mutton usually is used in preparing brown stock.)

White stock, prepared from veal, chicken, or fish; veal and chicken are sometimes combined. (Avoid pepper or any other seasoning that colors the stock.)

3. Cold meat jellies are used for other purposes than soup, for example:

Meat jellies (such as chicken), used as relishes for invalids

Aspic jelly, used in cold entrées (Aspic jelly is made by molding stock to which gelatin and seasonings have been added.)

Glaze (not to be classed as a real meat jelly) is a thick, dark brown, gluelike stock produced by the boiling down of ordinary stock to one-quarter its volume. It can be kept indefinitely, and is used for the following purposes:

To flavor and color soups and gravies

To rub over the surface of veal and other meats so as to produce a better appearance

4. Hot soups are thin or thick as follows:

Thin soups:

Simple broth, consommé, and bouillon

Cream soups (majority of them)

Fruit soups

Thick soups, thickened with starchy powder, cereals, or vegetables:

Purées, or thick cream soups

Heavy meat soups

Etc.

What is a bisque? (See dictionary.)

5. Soups are often named according to the principal ingredient used; for example:

Chicken

Giblet

Gumbo

Noodle or macaroni

Oxtail

6. Many soups, as well as stews, have "nationality"; pupil to state the names of the countries of which mulligatawny, Scotch broth, and other soups are typical.

PROTEIN-FOOD DISHES

(*Not salads or desserts*)

BROILED FISH

Dinner

Broiled fish	Hollandaise sauce	Potato curls
Young beets in butter		Bread and butter
Rhubarb sauce		Sponge cake

To Broil Fish

Method:

1. Clean the fish, wash, and dry it.
2. Grease a fine-wire double broiler, insert the fish, and turn it often while cooking. Employ a high temperature at first so as to sear the fish, then use a medium temperature for the remainder of time. The fish is done when the flesh separates easily from the bone.
3. Carefully remove fish, skin side down, to a platter.
4. Sprinkle fish with salt and pepper, and, if fish is not oily, add melted butter or a substitute.
5. Garnish with any of the following:
 - Parsley or cress
 - Hollandaise sauce
 - Stuffed olives or sliced pickles
 - Shreds of green or red pepper
 - Potato balls, roses, or border
 - Slices of lemon, hard-cooked eggs, tomatoes, or cucumbers

Notes:

1. Small fish should be split down the back, then cooked whole; remove head and tail, if preferred. Large fish, such as halibut, are sliced before being broiled.
2. A sauce rich in fat should be served with very lean fish.
3. Broiled and all other fish should always be served with some acid food; for example:

SALAD	SAUCE	GARNISH
Beet	Cucumber	Barberries
Celery	Hollandaise	Slices of pickle
Cucumber	Horse-radish	Slices of lemon
Tomato	Maitre d'hôtel butter	Slices of tomato
Etc.	Etc.	Etc.

The fatter the fish, the more necessary is the acid.

4. Note reasons for the use of acid foods with fish in general, that is, with both vertebrates and non-vertebrates:

a. Fish is lacking in extractives, or flavoring, and hence acid sauces are of use as appetizers.

b. For the following reasons acid is sometimes added to the water in which fish is cooked:

Acid somewhat hardens fish albumin and so keeps fish firm.

Acid (lemon juice) keeps a white fish white.

5. Fish is useful in the diet of sedentary persons.

6. Pupil to discuss, from the standpoint of caloric values, the following comparative statements:

a. Dark-colored, or oily, fish (mackerel, salmon, shad, etc.) are better for cold-weather diet.

b. Light-colored fish (cod, haddock, halibut, etc.) are better for warm-weather diet.

Hollandaise Sauce

Ingredients:

$\frac{1}{2}$ t.	$\frac{1}{2}$ c. butter
$\frac{1}{2}$ t.	2-3 yolks of eggs, or 1 egg, unbeaten
dash	$\frac{1}{8}$ t. salt (quantity varies with the saltiness of butter)
4 d.	1-2 tb. lemon juice or vinegar
dash	Paprika or cayenne
$\frac{1}{8}$ t.	$\frac{1}{8}$ c. boiling water

Method:

1. Place the butter in a bowl set in boiling water, and soften it slightly.

2. Add all the other ingredients, and beat mixture constantly with a Dover beater until it is thick and creamy and until any curdled condition has disappeared. Avoid overcooking the sauce. (Why is it not safe to use direct heat?)

3. Serve the sauce with the following foods:

Fish (such as baked or boiled fish)

Vegetables (cauliflower, asparagus, etc.)

SAVORY SOUFFLÉS

Sauce-Soufflé

(A savory soufflé in which white or other sauce is used as the basis)

Ingredients:

(6 servings)

	1 c. thin sauce:
$\frac{1}{4}$ t.	1 tb. flour
$\frac{1}{4}$ t.	1 tb. butter or a substitute
2 tb.	1 c. liquid, selected singly or in combination from the following:
	Milk, cream, or water
	Stock (meat or vegetable)
	Tomato pulp, strained
dash	$\frac{1}{2}$ t. salt
dash	$\frac{1}{8}$ t. paprika
$\frac{1}{2}$ tb.	1 c. solid or semi-solid food, minced or mashed, selected singly or in combination from the following (see Note 1):
	Meats, such as:
	Beef
	Chicken
	Game
	Lamb
	Veal
	Meat substitutes, such as:
	Fish or oysters
	Nuts
	Legumes (beans, etc.)
	Peanut or almond butter
	Cheese, American
	Cheese, cottage
$\frac{1}{2}$ t.	2 yolks of eggs, beaten very light
2 tb.	2 whites of eggs, beaten stiff
	Seasonings to taste, selected from the following (omit all, if preferred):
$\frac{1}{8}$ t.	Minced parsley (about 1-3 t.)
$\frac{1}{4}$ t.	Minced onion or onion juice (about 1-3 t.)
	Chopped mushrooms
	Lemon juice (good with fish)
	Celery salt
	Cayenne (good with fish or cheese)
	Buttered crumbs:
1 t.	$\frac{1}{4}$ c. cracker crumbs
$\frac{1}{4}$ t.	1 tb. butter or a substitute

Method:

1. Mix the sauce and seasonings with the meat or other minced or mashed food, then add the yolks of eggs.
2. Cool mixture somewhat, and fold in the whites of eggs.
3. Place mixture in a greased baking dish and cover it with buttered crumbs. (Place the class recipe in a custard cup.)
4. Bake soufflé in a steady, moderate oven about 30 min., or until it is very light (at least twice the original bulk), firm, and slightly brown. Bake cheese soufflé in a slow oven. (Why?)
5. Garnish with parsley and slices of tomato or lemon, and serve at once.

Notes:

1. The 1 c. solid or semi-solid food used is ordinarily composed of left-overs. American cheese is grated. Nuts are minced. Most other foods are very finely minced or mashed to a pulp after the food is cooked.

2. This recipe allows of great variation; note the following possibilities as to the thickness of the sauce, the number of eggs, etc.:

Use 1-4 tb. flour in making 1 c. sauce.

Use 1-3 tb. fat in making 1 c. sauce.

Use 1-3 yolks of eggs.

Use 1-4 whites of eggs.

Use $\frac{1}{4}$ -1 c. grated cheese.

Browned flour may be substituted for white flour in the sauce. Use a little more browned flour than white. Why? Bread crumbs are often added to the recipe. Cheese fondue is cheese soufflé in which one of the following is substituted for flour:

Bread crumbs (generally used)

Bread, sliced

Rice or other cereal

3. Savory soufflé, as well as all other baked soufflés, may be baked in small molds called timbales, such timbale mixtures always being made stiff enough to mold.

4. Savory soufflé and cheese fondue are sometimes served without being baked in the regular way. Heat the mixture in a double boiler (for example, until any cheese present is melted), and pour it over toast or crackers; serve at once or place in the oven for 2-5 min.

5. See pages 202 and 203 for synopses of (a) types of soufflés, (b) viscous substances.

Cheese Fondue

(Recipe I)

Ingredients:

$\frac{1}{2}$ tb.	$\frac{3}{4}$ c. soft, stale bread crumbs
2 tb.	$\frac{3}{4}$ c. hot milk or water
$\frac{1}{4}$ t.	$\frac{1}{2}$ tb. butter or a substitute
$\frac{1}{2}$ tb.	$\frac{3}{4}$ c. grated cheese
$\frac{1}{2}$ t.	2 yolks of eggs, beaten very light
2 tb.	2 whites of eggs, beaten stiff
dash	$\frac{1}{4}$ t. salt
dash	Pepper

Method:

1. Soak or cook crumbs and milk or water together to make a smooth mixture.
2. Add all the other ingredients except the eggs, and cook mixture 1 min. in a double boiler.
3. Add the foregoing mixture to the yolks of eggs.
4. Fold in the whites of eggs.
5. Grease a baking dish, add mixture, and bake in a moderate oven 15–20 min., or until fondue is puffed and firm. Serve at once.

Notes:

1. One-half c. cooked rice or other cereal may be substituted for crumbs in this recipe.
2. Is this recipe a "complete" dish?

Cheese Fondue**(Recipe II)****Ingredients:**

¼ yolk	4 yolks of eggs, beaten very light
2 tb.	3 c. milk
dash	⅓ t. salt
spk.	Dash of cayenne pepper
¼ white	4 whites of eggs, beaten stiff
1¼" square	3 slices stale bread (no crusts), thickly buttered
1 t.	¼ lb. American cheese, grated or finely chopped
dash	Paprika to taste

Method:

1. Mix the first four ingredients, then fold in the whites of eggs.
2. Put buttered bread in the bottom of a large buttered baking dish, sprinkle it with cheese and paprika, and add egg mixture.
3. Bake mixture in a hot oven 20 min., or until it is very light, and serve at once.

Notes:

1. If preferred, beat the yolks and whites of eggs together.
2. Bake the class recipe in a custard cup.

SAFETY RULES FOR HOT WEATHER¹

Protein foods have a marked tendency to undergo bacterial and chemical changes in warm weather. Certain classes of bacteria, of which *Bacillus proteus* is an example, produce what we call food poisons—certain chemical substances. Some of these chemical substances are called ptomaines. There are also bacterial and chemical products of foods which have a very disagreeable odor and yet are *not* poisons; some ptomaines are also included among these. Formerly it was thought that ptomaines were the cause of all the so-called food-poison illnesses (except where chemicals were added), but it has been shown in recent years

¹This outline was prepared by A. D. Emmett, Ph.D.

that ptomaines are, as a matter of fact, possibly the least of the factors with which we are to be concerned. In the large majority of tests that have been made where decomposed foods have apparently caused sickness, the presence of the poisonous ptomaines could not be proved. There are also products resulting from bacterial growth on foods called toxins. That is to say, we are now forced to recognize that the danger of both the toxins and the poisonous class of ptomaines must be borne in mind in the preservation of foods. Further, in considering the poisonous foods, it is well to recall that some people have a peculiar sensitization or susceptibility toward certain foods; that is, these foods act as poisons. This is illustrated in the case of eggs and strawberries.

Proper precautions should be carefully borne in mind in the preparation of foods for use and in the storage of foods, in order that the formation of the *poisonous* substances especially may be prevented.

1. Note that food poisoning is most likely to occur in hot, sultry weather.
2. Remember that foods for use in hot weather should be sound, fresh, and thoroughly cooked.
3. Foods should be eaten immediately after being cooked, or else be refrigerated properly. Beware of left-overs, particularly protein foods. If foods must be kept over, place them in the refrigerator at once.
4. Beware of foods in which food poisons most often occur, namely, the following protein foods:

- Meat (such as veal and cold-storage chicken)
- Fish (such as lobster salad, crab meat, shrimps, oysters, clams, etc.)
- Game or other meat that is too "high"
- Preserved food (such as meat, fish, or milk)
- Soup stock and other dishes rich in gelatin
- Peas and baked beans
- Ice cream

Beware of any putrifying odor in the foregoing foods.

5. Beware of protein foods cut in small pieces (see Note 1), especially chopped and other finely cut meats used in such dishes as the following:

- Sausage
- Creamed chicken, chicken salad, croquettes, soufflé, etc.
- Meat pie
- Veal stew
- Irish stew

6. Beware of eating protein foods at picnics, etc. (see Note 2), where these foods have had to be prepared some time in advance and have not been properly chilled and kept covered. Note the danger of allowing protein foods to stand at ordinary temperature after cooking.

Especially in hot weather, serve meats, etc., immediately after they are cooked, but if they must stand, observe the following precautions:

- a. Let them stand in the same kettles (not metal) in which they were cooked; transferring them from one pan to another only increases the possibility of contamination.

- b. Keep the vessels covered, so as to keep out the flies.
- c. Keep foods in a very clean, dry refrigerator; see that all decayed fruit, etc., is removed from refrigerator.
- d. Do not allow protein foods to remain for any length of time at a luke-warm temperature, else food poisons are very likely to be formed, as bacteria grow rapidly at such a temperature; the danger is particularly great if the foods are underdone. As soon as protein foods are done, cool them quickly, cover, and place them in the refrigerator; this applies to foods cooked in the fireless cooker as well as in other ways. When any of the following protein foods are not to be served at once, chill them as soon as they are taken from the fire:

Soups

Fish

Meat (veal, lamb, poultry)

Etc.

7. Beware of eating in restaurants, drug stores, candy shops; etc., where the cooking methods are not altogether known.

8. Remember that, in general, it is useless to reheat meat or other protein foods in order to make them wholesome, for, once food poisons are formed, some of them cannot be destroyed by heating.

Notes:

1. Most cases of food poisoning occur with foods rich in protein. If the foods are chopped, ground, or cut in small pieces, the tendency toward bacterial decomposition is increased owing to the additional surfaces exposed. Food poisons are produced by bacteria buried within the food as well as by those exposed to the air; that is, both anaërobic and aërobic bacteria produce food poisons.

2. Large numbers of persons at picnics, church suppers, etc., are sometimes made sick by eating creamed chicken, etc., owing to the fact that, in order to avoid hurry at the last minute, the foods were prepared a day or two in advance, instructions *a*, *b*, *c*, and *d* of Rule 6 not being followed.

3. Consult Marshall's *Microbiology* (1917 ed.); Kendall's *Bacteriology*; and Vaughan's *Cellular Toxins*.

OMELETS

A breakfast menu

Foamy omelet	Oatmeal	Baked potatoes
Toast	Coffee	

Foamy Omelet

Ingredients:

- 1 yolk of egg, beaten in a bowl with a Dover beater until thick and light yellow
- Salt
- Pepper (such as paprika or cayenne)
- 1 tb. milk or water
- 1 t. butter
- 1 white of egg, beaten on a plate with a wire beater until stiff, but not dry (beaten until it will not slip off plate when inverted)
- Parsley

Method:

1. Add salt, pepper, and liquid to the yolk of egg. (If preferred, add the salt to the white before beating the latter.)
2. Fold the white into the yolk; fold until the mass is of one consistency, that is, no liquid is left in the bottom of bowl.
3. Melt butter in a steel sautéing pan, and add omelet.
4. Cook by either of two methods:
 - a. Cook omelet over hot water:
 - (1) Place a little simmering water in a basin, for example, 1".
 - (2) Set sautéing pan of omelet in water and cover it with a basin.
 - (3) Cook omelet 4-6 min. Keep the water at the simmering point; do not let it fall below this point. Never allow the water to boil.
 - b. Cook omelet by direct heat:
 - (1) Turn flame as low as it will burn; keep flame low for the full period of cooking.
 - (2) Place asbestos mat at one side of the flame.
 - (3) Place omelet on one side of mat, as far from flame as possible.
 - (4) Cover with a bowl or basin. Turn pan around occasionally during the 5-10 min. cooking process. (Note that it is difficult to keep the omelet from browning.)
5. When omelet is very light, firm, and underneath is hard and either a deep orange or a delicate brown, dry upon surface by holding omelet in a very slow

baking-oven, or by holding it under a low flame in the broiling oven. If the omelet has been kept carefully covered in step 4, this oven-drying is not always necessary.

6. Score the omelet in a line at right angles to handle of pan, then fold omelet with a spatula, and invert pan so that it will be an easy matter to turn omelet out upon a hot platter.

7. Garnish with any of the following:

Parsley, chopped or whole

Celery tips, chopped or whole

Asparagus tips, cooked

Sauce, such as tomato

Curled bacon (cook narrow strips of bacon, then twist each piece between two forks)

8. Serve at once. (Why?)

Notes:

1. Fresh, ice-cold eggs are essential.

2. In general, a Dover beater produces a less porous white than a wire beater. Which is better for use in a foamy omelet, a velvety white or a spongy white?

Beat the white the last thing before combining the ingredients of the omelet. (Why?)

Do not fold the white into the yolk until the melted butter is ready, else loss of air results.

3. A good omelet is light (air and steam are the leavening agents), firm, and tender and delicate in texture. The ideal omelet is not a deep brown underneath. Browned egg is tough and is less easily digested than egg not browned.

An omelet is better cooked at a low temperature, since a high temperature toughens the large quantity of protein present. The omelet produced by method *a* (see step 4) is no more light and fluffy than that produced by method *b*, but it has a possible advantage in that it is never brown; cooking over hot water insures a low temperature and hence no browning.

4. A perfectly smooth sautéing pan is essential for making an omelet. Use salt or almost any scouring powder for polishing the pan; if salt is used, apply it with soft paper.

5. A foamy omelet is really sponge cake minus the sugar and flour.

6. Study any standard cookbook for the making of a French, or creamy, omelet.

POSSIBLE ADDITIONS TO FOAMY AND FRENCH OMELETS

Breadstuffs softened by being soaked in stock, milk, or other liquid, then drained:

Bread, stale

Crackers

Toast

Cereals (such as boiled rice or hominy)

Cheese, cottage

Cheese, grated

Fish and oysters (broiled, creamed, etc.)

Meats, cooked, such as:

Bacon

Ham

Brains (sautéed)

Tongue

Chicken

Veal

Nuts (such as almonds)

Nut butter (such as almond or peanut)

Seasonings, miscellaneous:

Herbs

Onion juice (a few drops to each egg)

Pepper (paprika, cayenne, etc.)

Salt (celery, garlic, and onion)

Sweets:

Fruit, canned or stewed

Fruit, fresh, lightly sugared:

Stoned cherries

Sliced peaches

Etc.

Honey

Jellies

Marmalades

Sugar, powdered or granulated

Caramel sauce

Vegetables and pickles:

Celery

Corn, stewed

Mushrooms

Olives (green, ripe, or pimento)

Onions, boiled or sautéed until brown

Onions, raw (grated)

Parsley ($\frac{1}{4}$ – $\frac{1}{2}$ t. to each egg)

Peas, green

Pepper, sweet green

Pickles (such as sweet-cucumber)

Pimentos

Spinach (mixed with minced ham)

Tomatoes (stewed until thick, and pressed through a sieve)

Notes:

1. The sweets are used in sweet omelets; the other additions, as a rule, are used in savory omelets only. Nuts are used in either sweet or savory omelets.

2. Average proportions are as follows:

a. Allow 2–4 tb. breadstuff or cooked cereal to each egg used.

b. With the exception of parsley, allow to each egg 1–2 tb. or more of each of the following:

Cheese

Fish

Fruits

Jelly

Meat

Nuts

Pickles

Vegetables

3. All meats, fish, nuts, vegetables, and pickles should be minced or chopped fine.

4. In most cases the ingredients may be added in any of the following ways:

a. Mixed with beaten yolk of egg used in making the omelet.

b. Folded into the omelet just before cooking.

c. Spread on omelet just before folding (tomatoes and all sweets are usually so treated).

5. Either tomato juice or meat stock may be substituted for the usual milk or water of omelet.

6. After folding a sweet omelet, sprinkle it with powdered sugar, and serve at once.

7. When any foamy omelet, savory or sweet, is baked, not sautéed, an omelet-soufflé results. (For omelet-soufflé, extra whites of eggs are sometimes added to the usual ingredients for omelet.) Make an omelet-soufflé as follows:

a. Butter a small baking dish, and put in a layer of meat or any other addition.

b. Pour in the omelet.

c. Place dish in a moderate oven and bake 15–20 min., or until omelet is light and firm.

d. Serve at once.

VEGETABLES

INTRODUCTION

AIMS IN COOKING VEGETABLES

- I. To make more digestible (by disintegration of cellulose, swelling of starch grains, etc.)
- II. To retain and develop flavor
- III. To preserve the food value as far as possible, that is, to retain all the juice, etc.

Note the following points in regard to III:

1. The juice is valuable chiefly because of the mineral salts, sugar, and flavorings dissolved in it.
2. Comparative losses in cooking vegetables are as follows:

METHOD	LOSS OF NUTRIMENT (AND FLAVOR)
a. Steaming, or cooking in a steamer.	No nutritive value lost
b. Boiling.....	No loss of nutriment if all the vegetable stock is utilized
c. Baking.....	No nutritive value lost

Baking undoubtedly is the best method for white and sweet potatoes. (Why?) It is an excellent method for any of the following:

Beets
Squash
Pumpkin
Onions
Etc.

To steam vegetables in class: Place vegetables in a sieve, place sieve over a saucepan of boiling water, cover it tight, and cook until vegetables are tender.

3. To boil a vegetable, place it in boiling salted water and boil it until it is tender. Wherever possible, preserve all the nutriment of the vegetable, taking the following steps:
 - a. Remove the skin with as thin parings as possible, or, better still, do not pare at all. If potatoes are boiled in their jackets, almost no nutriment escapes into the water.
 - b. Do not discard vegetable water left (except from some vegetables boiled in their skins); use it in sauces or soups.

It is a very simple matter to use all the vegetable stock in sauces (or soups) if either one of the following rules is observed:

- a. Boil the vegetable in as small a quantity of water as possible; that is, boil it in its own juices to a great extent. Use so little water that all or nearly all of it is evaporated at the end of the process. In the case of spinach no water need be added. Why?
- b. Use more water than in *a*, and then boil it down almost to dryness after vegetable is tender.
4. A very few vegetables (such as old onions and cabbage) are so strong in flavor that sometimes the cook may wish to sacrifice nutritive value in order to secure delicacy of flavor. Note the following method for extracting juices in boiling such vegetables.

To Boil Vegetables to Extract Juices

Method:

1. Pare or peel vegetables and cut them in small pieces; in other words, arrange to expose a large surface to the action of water.
2. Soak them 1-2 hr. in cold water. If they are dried or wilted, make vegetables crisp and plump by soaking them several hours in cold water to cover.
3. Place them over fire in cold, unsalted water in a large kettle, and heat gradually to the boiling point. Use much water in boiling, and change water often.
4. Boil them rapidly and uncovered until they are tender, then drain them.

Notes:

1. The following vegetables, especially if old and of certain varieties, are often considered too strong in flavor and are therefore cooked by part or all of the foregoing method:

Cabbage	Peppers, green, if "hot"
Onions	Sorrel
Parsnips	Turnips

2. The object in this method is to remove part of the strong juices and so to produce a vegetable of delicate flavor. Note that if juice is discarded, food value (ash and sugar chiefly) is sacrificed, unless, as is possible in all cases, the water drained from the vegetables is utilized in soups and sauces. Strong onion and cabbage waters are excellent for making cream soups. It is sometimes advisable to can such strong waters, and so to keep them for use in soups and sauces.

3. Possible aids in reducing or overcoming the strong flavors of vegetables are as follows:

Cut vegetables in small pieces.
 Soak vegetables in cold water.
 Place vegetables over fire in cold water.
 Use several waters, each time using a large quantity of water.
 Add a little soda to water (not a very desirable method).
 Add a little acid (such as vinegar) to water.

4. Little or no objectionable odor results from boiling onions, cabbage, etc., if the following rules are observed:

- a. Do not cover saucepan (thus allowing a gradual escape of odors).
- b. As soon as the cabbage or other vegetable is drained, pour the water into the sink and then flush the sink well with cold water.

Miscellaneous Notes on Vegetables

1. Possible methods of preserving the brightness of color of green peas and other vegetables during boiling are as follows:

Cook vegetables in uncovered saucepans.

Avoid overcooking the vegetables.

Add salt to water.

Add a little soda to water.

Pour cold water over or through vegetables (spinach, etc.), after draining off the water in which they have been cooked.

2. Green peas and other green vegetables of delicate flavor lose their flavor and sweetness unless they are very carefully cooked.

3. As a rule, onions boil tender in 45-60 min. Peel onions under cold water in order that the volatile bodies so irritating to the eyes may be retained by the water.

4. Note ways of serving boiled or steamed vegetables:

a. With melted butter, salt, pepper, and vegetable stock (best method for vegetables of delicate flavor, such as asparagus)

b. With cream sauce, or with milk and cream and seasonings (cream sauce has a tendency to conceal the real flavor of vegetables)

c. Mashed

d. Escalloped, with white sauce or not

e. Browned in oven after being rolled in melted butter, then in fine crumbs

Etc.

5. For small children or persons of delicate digestion it is often well to press the peas, corn, etc., through a sieve before serving them.

BOILED, STEAMED, AND BAKED VEGETABLES

Luncheon

Creamed chicken on toast

Biscuits

Green peas, with butter

Lemon sherbet

Green Peas, with Butter or Cream

Method:

1. Wash freshly picked young peas, and shell them. (Why use fresh peas?) If it is necessary to use peas at all wilted, freshen shelled peas by soaking them in cold water 15-20 min., then drain them.

2. Barely cover peas with boiling water containing a little salt; use only a little more than enough water to keep the peas from burning. Cook peas 10-20 min., or until they are tender, in an uncovered saucepan; a little sugar in the water is sometimes a desirable addition.

Very young peas will cook tender in 10 min. Avoid overcooking even old peas, since almost any peas will become tough if they are cooked over 20 min.

3. Remove peas from the liquid, boil the liquid down almost to dryness, and pour it over the peas.

4. Season with salt, pepper, and butter or cream; a little sugar may be added, if desired; for example, $\frac{1}{2}$ t. sugar to 1 c. peas.

5. Serve hot and at once.

Notes:

1. A lettuce leaf laid in the bottom of the saucepan will help to keep the peas from scorching.

2. Green peas are pretty served as follows in turnip cups:

- a. Pare a small, round turnip, and cut off the stem end so that the vegetable will stand.
- b. Form a cup by scooping out the inside; the walls of the cup should be at least $\frac{1}{8}$ " thick.
- c. Cover cup with boiling water and boil it 25-30 min., or until it is tender.
- d. Drain, fill cup with green peas cooked in a cream sauce, and sprinkle with minced parsley.

The following are possible substitutes for the turnip cups:

- Beet or other vegetable cups
- Toast or rice croustades
- Timbale cases (see page 94)

Sweet Corn on the Cob**Method:**

1. Select young, fresh ears. (Corn should be cooked as soon as possible after being picked, since it loses its sweetness with age.)
2. Remove the husks and all the silk.
3. Boil corn until it is tender, allowing 7–12 min. for young corn, and 20 min. for very old corn. (Most persons cook corn too long; long boiling toughens the cellulose.)
4. Drain, and serve at once.

Notes:

1. Cook the corn in soft water, since hard water hardens the cellulose and turns it yellow.
2. Pupil to experiment as to the desirability of salt in the water for boiling corn.

Succotash

(A derivative of boiled corn)

Ingredients:

- 2 c. fresh raw sweet corn cut from the cob
- 1½ c. shelled lima or kidney beans, fresh
- Salt and pepper
- 1 c. cream (or 1 c. milk and 1–2 tb. butter)

Method:

1. Add boiling salted water barely to cover beans, and cook 30 min., or until they are almost tender.
2. Add corn, and simmer mixture 10–15 min.
3. Add milk and seasonings, simmer 5 min., and serve. Thicken the liquid with a little flour, if desired.

Notes:

1. Use so little water in cooking the vegetables that all of it can be retained in the sauce.
2. If corn is at all tough, score through each row of the kernels, press out the pulp with the dull edge of a knife, then scrape the cob with the knife.
3. The flavor of the succotash is improved if the corn cobs are boiled with the beans.
4. Succotash is also made from canned or dried beans and corn; see recipe, page 106.

Okra, Creole Style**Method:**

1. Wash 1 doz. tender okra pods, and cut off both ends from each pod.
2. Place pods in boiling salted water and cook until they are tender.
3. Sauté the following together without browning:
 - 1 chopped onion
 - 1½ a red or green pepper
 - 1 clove of garlic
 - A little butter
4. Add to the onion mixture 6–8 chopped tomatoes and simmer ½ hr.
5. Add the boiled okra pods, cover, and cook until the mixture thickens.
6. Add salt, and serve the whole on slices of hot buttered toast.

Asparagus on Toast**Method:**

1. Cut off lower parts of stalks as far down as they will snap, wash asparagus, remove scales, and tie in bunches.
2. Steam; or cook in boiling salted water 15 min., or until asparagus is tender, leaving tips out of water the first 10 min. (Use but little water in boiling.)
3. Drain, place bunch on buttered toast, and remove string.
4. Add melted butter, paprika, and also the asparagus liquor boiled down to a very small volume.

Notes:

1. Cucumbers, cut in strips or slices, may be boiled or steamed and served on toast the same as asparagus. Note other methods for serving cucumbers:
 - Fried
 - Sautéed
 - Stuffed and baked the same as peppers or tomatoes
 - Chopped and added to meat or fish sauces
 - Sliced for use in salad, or used as a cup for any salad filling
2. Various sauces, such as the following, may be prepared from asparagus water.

Asparagus Sauce**Ingredients:**

- $\frac{1}{3}$ c. asparagus water
- 2 tb. cream
- 2 yolks of eggs, beaten very light
- 2 t. chopped parsley
- Salt and pepper
- A blade of mace
- $\frac{3}{4}$ t. lemon juice
- 2 t. butter

Method:

1. Mix all but the last two ingredients and stir them 3–4 min. in a double boiler. Avoid overcooking. Why?
2. Remove sauce from fire and add butter and acid.
3. Serve on asparagus, meat croquettes, or other foods.

Boiled Cabbage**Method:**

1. Nearly fill with water a very large saucepan.
2. When the water is boiling hard, add cabbage leaves one at a time and so gradually that boiling does not cease.
3. Press down the leaves and boil them rapidly 10–15 min. (Do not cover pan.) If cabbage is very young, a period of 6 min. is sometimes long enough. Avoid

cooking the cabbage until the crispness is all gone, else it loses its flavor and color. (When cabbage is served, the leaves should be crisp, and white or a delicate green, not brown.)

4. Drain at once, and add salt, pepper, and butter.

Notes:

1. Cabbage boiled by this method is as delicate as cauliflower and much less expensive. Many consider the heart of the cabbage as good as the leaves for cooking purposes.

2. If preferred, steam the cabbage for the same length of time, that is, 10-15 min.

3. If red cabbage loses color during the boiling process, restore the color by adding a little vinegar to the water.

4. Cabbage is rich in mineral matter and is a valuable food. It is one of the most useful vegetables, being available during the late fall, winter, and spring months, when other green vegetables may be difficult to procure.

5. Discuss the relative digestibility of raw cabbage, cabbage cooked a short time, and cabbage cooked a long time.

Boiled Beets

Method:

1. Wash beets, and if they are wilted soak them over night in cold water. If beets are very wilted, discard them, as they are not fit for cooking.

2. Cut off stems up to within 2"-3" of each beet, keeping skin of beet intact so as to avoid bleeding.

3. Cook beets in boiling water until they are tender, allowing 1-5 hr. according to the age of the beets; avoid fork holes in the beets.

4. Drain beets, and place them in cold water 2-3 min. (Why?)

5. Rub off the skins, and slice or quarter the beets.

6. Add salt, pepper, and butter and serve hot; or add salt, pepper, and vinegar and serve hot or cold.

Notes:

1. The addition of vinegar to boiled beets helps to disintegrate, or break up, the cellulose.

2. In all recipes for beets aim at the retention of ash, sugar, and color. Steaming and baking are both excellent methods for cooking beets. Why?

Baked Beets

Method:

1. Wash beets and cut off stems up to within 2"-3" of each beet.

2. Bake beets until they are tender, allowing 1-2 hr. for old beets, less time for very young beets. Turn them over often during the baking process, but do not cause bleeding by use of a fork.

3. Peel, slice, and serve them in any of the ways in which boiled beets are served.

Note:

The flavor of baked beets is excellent. Compare baked beets with boiled beets as to color and sweetness.

SOUR-SWEET VEGETABLES

Luncheon

Cheese soufflé

Bread and butter

Wilted lettuce

Stewed plums

Sponge cake

The following vegetables are sometimes served with sour-sweet sauces—that is, sauces containing vinegar, or lemon juice, and sugar:

String beans (green or wax)

Carrots

Lettuce

Etc.

String Beans with Bacon

Method:

1. Wash and string beans.
2. Gather a bunch of pods (parallel) in the hand, lay them on a meat board, and cut all at once into inch pieces, cutting straight across or diagonally.
3. Place them in boiling salted water and cook until they are tender, then drain.
4. Cut slices of bacon into small cubes and sauté them to a delicate brown.
5. Add the cooked beans and a little onion juice to the bacon, mix, heat well, and serve with or without a sour-sweet sauce (see recipe below).

Note:

Carrots and some other vegetables may be substituted for beans.

Sour-Sweet Sauce

Ingredients:

2 tb. sugar

$\frac{1}{4}$ tb. flour

$\frac{1}{4}$ c. boiling liquid, selected singly or in combination from the following:

Water

Meat stock

Vegetable stock

$\frac{1}{8}$ t. salt

Dash of paprika

1 tb. vinegar

Method:

1. Caramelize the sugar in a very small sautéing pan or saucepan.
2. Remove from the fire, add the flour, and stir until mixture is smooth.

3. Stirring constantly, add the boiling liquid very gradually, then cook mixture to the consistency of thin cream.

4. Add the other ingredients, and reheat.

Note:

This recipe results in $\frac{1}{4}$ c. sauce, a sufficient dressing for 2 c. cooked string beans, boiled carrots, or other vegetable. After pouring the sauce over the vegetable, mix with a fork until every piece of vegetable is covered with the dressing.

Wilted Lettuce

Ingredients:

(4 servings)

1 h. tb.	2 c. shredded lettuce, packed fairly solid
4 squares	4 thin slices bacon or ham, cut with shears into $\frac{1}{4}$ " squares
dash	$\frac{1}{8}$ t. paprika
1 t.	$1\frac{1}{2}$ tb. light brown sugar (avoid dark)
1 tb.	3-4 tb. very weak vinegar

Method:

1. Sauté the meat until it is crisp.
2. Add the paprika, sugar, and vinegar to the meat, and cook until mixture is as thick as cream.
3. Pour this hot sour-sweet sauce over the lettuce, and mix well with a fork.
4. Serve at once as a vegetable.

Notes:

1. This recipe may also be served ice-cold as a salad; in this case either hot or cold dressing should be added.
2. The sour-sweet sauce is really one type of French dressing.
3. *To shred lettuce:* Wash the lettuce, fold every three or four leaves together to form a tight roll, then cut in $\frac{1}{2}$ " ribbons by means of shears.
4. If preferred, allow the leaves to remain whole.
5. Head lettuce is usually more desirable than the leaf.
6. Note possible variations in the recipe:
 - Substitute sour cream for part of the vinegar.
 - Substitute dandelion greens or shredded cabbage for the lettuce.
 - Add a beaten egg.
 - Add sliced young green onions.
 - Garnish with slices of hard-cooked eggs.

FRESH-VEGETABLE STEWS, OR CHOWDERS

Luncheon

Vegetable stew

Graham wafers

Baked custard

Mixed-Vegetable Chowder

Ingredients:

	Vegetables cut in $\frac{1}{4}$ " cubes:	
2 t.	$\frac{1}{3}$ c. carrots	} measured after being cut into cubes or chopped
2 t.	$\frac{1}{3}$ c. turnips	
1 tb.	$\frac{1}{2}$ c. celery	
3 tb.	$1\frac{1}{2}$ c. potatoes	
	Vegetables, chopped:	
$\frac{1}{4}$ t.	$\frac{1}{2}$ tb. parsley	} measured after being cut into cubes or chopped
$\frac{1}{2}$ t.	$\frac{1}{2}$ onion	
$\frac{1}{2}$ t.	$\frac{1}{4}$ green pepper	
1 tb.	$\frac{1}{2}$ c. tomatoes	
1 t.	$\frac{1}{2}$ c. green corn	
$1\frac{1}{2}$ t.	5 tb. bacon fat	
$\frac{1}{2}$ c.	Water to cover sautéed vegetables (1 pt. or more water)	
dash	Salt and paprika	

Corn Chowder

Ingredients:

$1\frac{1}{2}$ tb.	1 qt. sweet corn, fresh raw or canned
2 tb.	1 pt. strained tomatoes
1 h. tb.	1 pt. $\frac{1}{2}$ " potato cubes
	Vegetables, chopped fine:
$\frac{1}{2}$ t.	Green pepper
1 t.	Celery or celery root
$\frac{1}{4}$ t.	Parsley
1 t.	1 onion
one $\frac{1}{4}$ " cube	Two 1" cubes fat salt pork
$\frac{1}{3}$ c. (about)	Water to cover sautéed vegetables
$\frac{1}{2}$ Uneda	1 tb. flour or cracker crumbs
$\frac{1}{4}$ c. milk	1 pt. milk
1 t.	$1\frac{1}{2}$ tb. butter
dash	1 t. salt
dash	Pepper

Potato Chowder

Ingredients:

2 h. tb.	2 c. potato cubes ($\frac{1}{8}$ "
1 t.	1 small onion, chopped
3 cubes	2 tb. $\frac{1}{4}$ " cubes of bacon
$\frac{1}{4}$ c.	Water to cover sautéed vegetables
$\frac{1}{4}$ t.	$\frac{1}{2}$ tb. flour
1 tb.	1 c. milk
$\frac{1}{2}$ t.	$\frac{1}{2}$ tb. butter
dash	Salt and pepper
spk.	1 t. chopped parsley

GENERAL METHOD FOR VEGETABLE STEWS

1. Add to the fat all the vegetables except any of the following included in the recipe, and sauté 10 min.

Corn

Tomatoes

Parsley

Keep pan covered as much as possible, and stir contents once in a while.

2. Add water to cover the vegetables, place lid on pan, and simmer $\frac{1}{2}$ –2 hr., or until the vegetables are tender.

3. Add corn and tomatoes, if used, and boil 3 min.

4. Add milk, if called for, also thickening and seasoning (butter, parsley, etc.). Boil mixture 1 min., and serve over crackers. (Why add milk last thing?)

Notes:

1. These stews are useful during every season of the year.
2. Soup may be made from any of the stews by the addition of extra liquid and the mashing of part or all of the solids.
3. See dried-legume stews, *Food Economy*, page 95.

SALADS AND SALAD DRESSINGS

INTRODUCTION

CLASSIFICATION OF SALADS

(This classification is based on food values.)

I. Light, or appetizer, salads (see Note 2):

1. Gelatin-jelly salads
2. Juicy-vegetable salads (combinations of fresh and very juicy vegetables, such as salad greens, celery, tomatoes, etc.)

II. Carbohydrate-food salads (see Note 3):

1. Fruit salads (made of fruits rich in starch or sugar, such as bananas and dates)
2. Vegetable salads (made of vegetables rich in starch, such as potatoes)
3. Starchy-nut salads (such as chestnut)

III. Protein-food salads (see Note 4):

1. Cheese salads
2. Egg salads
3. Fish salads
4. Meat salads
5. Nut salads
6. Dried-legume salads (pea, bean, peanut, etc.)

IV. Complete-dish salads (see Note 5):

1. Salads containing protein material (such as cream cheese) and fruits rich in starch or sugar.
2. Salads containing protein material and vegetables rich in starch or sugar.
3. Salads containing protein material and starchy nuts.
4. Salads containing protein material and rice or hominy.

Notes:

1. The four groups are named according to the predominating foodstuff in each. The last three groups are more substantial from the standpoint of protein and carbohydrates, but are no more essential in the diet than are the appetizer salads. Salads vary greatly in nutritive value, inasmuch as so many combinations of meat, eggs, cheese, vegetables, fruit, etc., are possible in the various groups.

2. Appetizer salads are valuable chiefly because they contain the following constituents:

Appetizing flavors
Mineral matter
Water

Both types of appetizer salads mentioned in the classification are especially appropriate in course dinners; as a rule, either type is served with the meat course of the dinner or just following it.

A palatable salad is made by the addition of French dressing to one or more of the salad greens, plain or shredded.

Toasted crackers are good with appetizer salads.

3. Fruits and vegetables for carbohydrate-food, or energy, salads, are used either raw or cooked.

All salad dressings are rich in energy value.

4. Each of the protein-food salads is often served as the principal course in a meal, that is, as a meat substitute.

5. Complete-dish salads are salads each of which approaches the point of being a complete meal in itself. All are excellent for the use of left-overs.

CLASSIFICATION OF SALAD DRESSINGS

I. Uncooked dressings:

Lemon or lime (see Note 2)

French (vinegar, or lemon juice, and oil)

Mayonnaise (egg and oil)

Sour-cream or sweet-cream

II. Cooked dressings (incorrectly called cooked mayonnaise)

Notes:

1. No rule can be given as to which dressings to serve with certain salads; in fact, each of the dressings listed is served with every kind of salad. Many persons prefer mayonnaise with meat and fish; note, however, that salads containing much protein and fat, such as chicken with mayonnaise, are, as a rule, slowly digested.

2. Lemon or lime juice, by itself or mixed with a little sugar, is good on lettuce. A mixture of vinegar and sugar is also used.

3. Possible seasonings for salad dressings are as follows:

Curry powder

Mustard (used sparingly, if at all)

Paprika or cayenne

Salt

Sugar (permissible with fruit salads, but not with meat or fish)

4. Beaten white of egg is a very good substitute for whipped cream in salad dressings.

5. A dressing, if correctly made, is of the right thickness to cling well to the food; therefore, if a dressing is too thick, thin it with sour or sweet cream just before serving. (Never thin French dressing.)

6. Since acid wilts green vegetables, salad dressing should be added to the vegetables just before they are served. On the contrary, cubes or slices of meat, fish, and possibly potatoes, celery, apples, and some other vegetables and fruits, should be treated as follows:

a. Marinate them; that is, let them stand in French dressing for an hour or longer before serving them.

b. Drain, add dressing, and serve.

7. A salad should be well mixed. Half fill the salad bowl with alternate layers of food and dressing, and toss them together.

CLASSIFICATION OF SALAD VEGETABLES

I. Salad greens:

Cabbage, finely shredded
Celery cabbage.
Celery tips
Chard, Swiss
Chicory
Cress, water
Cress, garden (or peppergrass)
Dandelion
Endive
Escarole
Mung-bean sprouts (Chinese)
Lettuce:
 Leaf
 Head
Mustard
Nasturtium (stems, leaves, and seeds)

II. Vegetables other than salad greens:

Artichokes (cooked)
Asparagus
Beans, string
Beans, whole (such as lima, kidney, or navy)
Beets
Cauliflower
Carrots
*Celery
Corn
*Cucumbers
*Onions
Peas, green
Potatoes
Spinach
*Tomatoes

Notes:

1. Vegetables the names of which are preceded by an asterisk are usually served raw; the others are usually cooked before being used in a salad.
2. The majority of salad vegetables are succulent; that is, they consist chiefly of water.
3. The following points pertain to Group I vegetables:
 - a. All are light vegetables, and are eaten raw.
 - b. Swiss chard is good served by itself, with dressing; likewise several of the other salad greens.
 - c. Which of the salad greens are substitutes for lettuce?
 - d. Lettuce wilts less if cut under water.
 - e. Head lettuce is prettier than leaf lettuce, as a rule.
4. Some of the Group II vegetables are light, some heavy; some are eaten raw, some cooked.

CLASSIFICATION OF SALAD GARNISHES

I. Garnishes of delicate or neutral colors:

Cabbage leaves, young	Nasturtium leaves
Capers	Nuts, whole, ground, or grated (such as pistachio nuts)
Celery tips or curled celery	Olives, green (not stuffed)
Cheese (Neufchâtel, etc.)	Parsley
Cucumbers or bananas split lengthwise into the natural thirds, then sliced	Pepper, sweet green, shredded
Grapes, white	Pickles
Lettuce hearts or shredded lettuce	Tomato or beet juice for tinting dressing a delicate pink
Marshmallows	Truffles
Mint	Etc.

II. Garnishes of high and contrasting colors:

Barberries	Lobster coral
Blood-orange carpels	Nasturtium blossoms
Beets	Olives, black
Carrots	Olives, stuffed (cut in crosswise slices)
Cherries	Pimentos
Eggs (hard-cooked), sliced or riced	Pomegranate seeds
Grapes, red or blue	Radishes
Lemon	Tomatoes
Jellies	Etc.

Notes:

1. Garnishes should be:
 - a. Simple.
 - b. Edible: In general, avoid inedible garnishes with salads and other dishes.
 - c. Suited to the food with which served: Do not, as a rule, garnish a fruit salad with vegetables, and vice versa.
 - d. Harmonious as to color and flavor with the rest of the salad: Beware of poor color combinations, such as tomatoes with beets.
2. Pupil to check the names of those garnishes which should be used very sparingly because of their biting, or pungent, qualities.
3. Garnishes may be shredded, sliced, or cut in cubes and fancy shapes. A small flour sieve may be used by each pupil for grating almonds and other nuts.
4. Curled celery is prepared as follows:
 - a. Cut thick white stalks into pieces about 2" long.
 - b. Make several lengthwise slashes from either end of each piece almost to the center.
 - c. Soak celery 15-60 min. in cold water (preferably ice water).
5. When a salad is served as the main dish of a luncheon, a rich and thick fruit preserve, such as plum conserve, is often placed as a garnish on the plate beside the salad.
6. Small, red cinnamon candies are sometimes useful for coloring raw apples for use in salads (also for coloring the juices of fruit relishes, compotes, etc.).
7. Hill, *Practical Cooking and Serving*, page 631, gives suggestions on the use of the following as garnishes:

Hard-cooked eggs	Slices of lemon
Pickled beets	Radishes

ESSENTIALS OF A GOOD SALAD

- I. Attractive design and color scheme
- II. Freshness, crispness, and icy coldness
- III. Correct combination of food flavors
- IV. Correct seasoning in the dressing
- V. Dainty service (use care as to color of dishes, etc.)

Notes:

- 1. Avoid cutting the ingredients of a salad too fine.
- 2. Remember in cooking, as elsewhere, that "human thought makes interesting."

Plan salads with the following ideas in mind:

- a. Odd are prettier than even numbers in a design scheme.
 - b. A salad should not be flat and scattered, but should be centralized or piled, with a peak in the center. A bit of color in the center helps to complete the scheme and give character, for example:
 - Cherry
 - Paprika
 - Pepper, green
- 3. The background of a salad may consist of either of the following:
 - a. Salad greens, such as lettuce or cress, served plain or shredded.
 - b. A salad cup or bowl, made by scooping out the heart of any of the following foods:

- Apple (red)
 - Cabbage
 - Cucumber
 - Grapefruit
 - Orange or lemon
 - Pepper, sweet green
 - Pineapple (small end of)
 - Tomato

A heart leaf of head lettuce may also be used as a cup; use a leaf as a cover, if desired.

APPETIZER SALADS

Luncheon for a hot day

	Combination salad	
	Cheese toast or crackers, or cottage-cheese sandwiches	
Lemon ice		Sponge cake

GELATIN-JELLY SALADS

The following, among others, are types of gelatin-jelly salads:

Tomato jelly (tomato juice to which gelatin is added)
Aspic jelly (chicken or meat stock to which gelatin is added)
Cucumber jelly
Lemon jelly
Mint jelly

All the types, as a rule, are unsweetened.

Vegetables (such as tomatoes), fish, chicken, and meats are often molded in any of these jellies; for example, sardines are good in a lemon jelly.

Cabbage Salad

Ingredients:

(8 servings)

1 t.	1 tb. granulated gelatin
2 t.	$\frac{1}{4}$ c. cold water
4 t.	$\frac{1}{2}$ c. boiling water
$\frac{3}{4}$ t.	1 $\frac{1}{2}$ tb. lemon juice
$\frac{1}{2}$ tb.	3 tb. strong vinegar
dash	$\frac{1}{4}$ t. salt
2 t.	$\frac{1}{4}$ c. sugar
$\frac{1}{2}$ t.	2 pimentos, chopped fine
1 $\frac{1}{2}$ t.	$\frac{1}{2}$ c. finely chopped celery
1 tb.	1 c. cabbage cut in fine, long shreds

Method:

1. Soak gelatin 3 min. in cold water, then dissolve it in boiling water.
2. Add the lemon juice, vinegar, salt, and sugar, and stir to dissolve the last named.
3. Stir in the three vegetables.
4. Pour mixture into individual molds, chill, turn out on head lettuce, and add cooked salad dressing.

Note:

If preferred, pour the salad into a shallow pan, chill, turn out on a board, and cut in cubes or fancy shapes.

Tomato-Jelly Salad*Recipe I**(6 servings)***Ingredients:**

$\frac{1}{4}$ c.	2 c. stewed tomatoes
$\frac{1}{4}$ tb.	Seasonings for the tomatoes (see Note 1):
$\frac{1}{4}$ tb.	2 tb. chopped onion
spk.	2 tb. chopped celery
dash	1 peppercorn
spk.	2 tb. sugar
dash	$\frac{1}{2}$ bay leaf
dash	$\frac{1}{4}$ t. salt
1 t.	$\frac{1}{8}$ t. paprika
1 tb.	$1\frac{3}{4}$ tb. granulated gelatin
1 t. celery	3 tb. cold water
	Chopped celery or sliced eggs for lining mold

Method:

1. Add the seasonings to the tomatoes and let them simmer 15 min.
2. Strain tomatoes, add water to make up original volume, and heat to boiling point.
3. Soak gelatin in the cold water 3-5 min., then dissolve it very thoroughly in the boiling-hot tomato juice.
4. Cover the bottom of six small molds with chopped celery or slices of hard-cooked eggs, add jelly, and chill.
5. Turn out molds on head lettuce and serve with a little cooked salad dressing or mayonnaise.

Notes:

1. It is well to test the seasoning by tasting the mixture before molding it. Onion or celery salt, mace, cloves, etc., are all possible seasonings.
2. Chopped nuts are a good addition.
3. Note the following recipe for tomato jelly made with agar-agar, so-called "vegetable gelatin."

Tomato-Jelly Salad*Recipe II**(4 servings)***Ingredients:**

$1\frac{1}{2}$ c.	strained tomato pulp and juice
$\frac{1}{2}$	bay leaf
1 tb.	onion, chopped
$\frac{1}{2}$ t.	celery salt
2 t.	sugar
$\frac{1}{4}$ t.	salt
1 tb.	lemon juice
$2\frac{1}{4}$ tb.	"vegetable gelatin"
6 tb.	boiling water

Method:

1. Mix the first six ingredients, let them simmer until they are reduced to one-half the volume, then remove the bay leaf.
2. Soak the gelatin 15-20 min. in warm water to cover, then drain, and discard the water.
3. Add 6 tb. boiling water to the soaked gelatin, cover, and boil 8-10 min., or until mixture is clear.
4. If the gelatin solution is reduced by boiling to a volume of less than 6 tb., add water to make up the 6 tb.
5. Mix the tomatoes, lemon juice, and gelatin solution, pour mixture into individual molds, and let it stand at room temperature 50 min., or until it is set.
6. Chill, turn out upon lettuce leaves, and serve with mayonnaise, cooked dressing, or French dressing.

Grapefruit Salad**Method:**

1. Prepare a simple lemon jelly from the following:
 - 2 tb. granulated gelatin
 - $\frac{1}{4}$ c. cold water
 - 1 c. boiling water
 - $\frac{1}{4}$ c. lemon juice
 - 6 tb. sugar
 - Dash of salt
2. When the jelly begins to set, add $1\frac{1}{2}$ c. pulp of grapefruit.
3. Mold, and chill.

LIGHT-VEGETABLE SALADS**Combination Salad****Ingredients:**

Lettuce (plain or clipped with the scissors)
Tomatoes, sliced
Cucumbers or sweet green pepper, sliced
French dressing

Method:

1. Mix the sliced vegetables with the dressing, and place them on lettuce.
2. Garnish salad as desired.

Notes:

1. Cress or any other salad green may be substituted for lettuce. See page 157 for a list of salad greens.
2. Cooked dressing or mayonnaise may be substituted for French dressing; the French dressing, however, is more popular.

Poinsettia Salad

Method:

1. Scald a medium-sized tomato, peel and chill it, and remove the stem end.
2. Cut the tomato in six sections, but not all the way down. (Cut from the stem end.)
3. Place it on lettuce, press it open like a flower, and fill the center with mayonnaise or other dressing.
4. Garnish with a floweret of boiled cauliflower.

Note:

Chopped celery or cucumber may be mixed with the dressing.

Cucumber Salad

Method:

1. Pare a cucumber and place it on a plate.
2. Make 8-10 parallel slits at right angles to plate, allowing each slit to extend almost through the cucumber.
3. Place a slice of red radish in each slit.
4. Add French dressing.

Note:

If preferred, treat a cucumber as follows:

- a. Slice, and soak it in ice water until ready to serve.
- b. Drain, and place it in a bowl with ice.
- c. Serve with French dressing.

Miscellaneous Light-Vegetable Salads

(French dressing or a substitute is understood in each of the salads; lettuce is understood in each of them except the last three.)

1. White or red cabbage, shredded (by itself, or sprinkled with chopped mint or sliced Brazil nuts)
2. Curled celery
3. Vegetable cup (tomato, sweet green pepper, beet, or carrot) filled with any light vegetable, such as green peas, celery, or cabbage
4. French artichoke
5. Raw carrots (grated or cut in small irregular and jagged pieces), chopped celery or pecans
6. A mold of spinach on a slice of boiled turnip
7. String beans, minced onion, thinly sliced radishes
8. Sliced Spanish onions, sliced oranges, chopped green peppers
9. Cress, radishes or celery, cucumbers
10. $\frac{1}{2}$ c. shredded endive or chicory, $\frac{1}{3}$ c. diced celery, 1 t. each of chopped parsley, onion, and green pepper or pimento; slices of cucumber or tomato as garnish
11. Cauliflower, pimentos, head lettuce or endive

FRENCH DRESSING AND SALAD ACCOMPANIMENTS

French Dressing

Ingredients:

dash	$\frac{1}{2}$ t. salt
spk.	$\frac{1}{8}$ t. pepper (such as paprika)
$\frac{3}{8}$ t.	1 tb. vinegar or lemon juice, or a mixture of the two
2 t.	3 tb. olive oil (4-5 tb. sometimes used)
spk.	Dash of sugar, if desired

Method:

1. Mix the oil and seasonings together in a bowl.
2. Add acid slowly, and beat hard 1-3 min., or until a thin emulsion results; note that the vinegar disappears as such. The emulsion results more quickly if all ingredients and utensils are cold at the start, and a small piece of ice is placed in the bowl.

Notes:

1. Use care as to seasonings. Note the following possible variations in and additions to French dressing. (Most of these may also be used with cooked dressings and with mayonnaise.)

ACIDS (Used singly or in combination)	POWDERED SEASONINGS	VEGETABLES AND PICKLES FINELY CHOPPED	MISCELLANEOUS ADDITIONS
Vinegar: Cider Chervil Raspberry Tarragon Etc. Fruit acid: Grapefruit Lemon Lime Orange Pineapple Etc.	Curry (good in a dressing for cheese salad) Pepper: Cayenne Paprika White Salt: Celery Garlic Onion Sugar, powdered	Beets Celery Chives Mint Onions (such as Bermuda) Parsley Peppergrass Peppers, green or red Pimentos Watercress Pickles: Dill Olives, green or ripe Etc.	Capers Cheese, Roquefort or cream Chili sauce Eggs, hard-cooked and chopped Garlic clove Horse-radish Nuts, chopped Onion juice Sardines, reduced to a pulp Sauce, tabasco Sauce, Worcestershire Tomato catsup

Fruit acid, a much more wholesome acid than vinegar, may be used in place of part or all of the vinegar.

The bowl may be rubbed with garlic, or a clove of garlic, cut in halves, may be allowed to stand in French dressing 2 hr. before it is served.

French dressing which has been creamed with Roquefort or cream cheese is excellent on head lettuce.

2. Various methods of beating the ingredients together are as follows:

Use a Dover beater.

Use a spoon or fork.

Shake ingredients together in a bottle or cruet.

3. French dressing does not cling well to lettuce and other foods unless it is slightly thick. It is never a very thick emulsion. Since French dressing is not a permanent emulsion, it is often well to prepare it at the table.

4. Note the chief uses of French dressing:

- a. With raw fruits, such as oranges
- b. With raw salad vegetables, such as lettuce, cress, etc. (green vegetables, carrots, etc., are used)
- c. For marinating cooked salad foods, such as chicken, fish, or potatoes. Use more acid than oil in this case; for example, use 1 tb. oil to 3 tb. vinegar. Prepare the food and let it stand in the dressing 1-2 hr., then drain and add mayonnaise or other dressing.

5. A peanut dressing is made by beating the following ingredients together until they are creamy:

- $\frac{1}{4}$ c. peanut butter (this corresponds to the oil of French dressing)
- 2 tb. water
- Paprika
- 2 tb. vinegar or lemon juice
- 1 t. salt
- Mustard, if desired

Cheese Toast or Crackers

Ingredients:

- 1 cracker or 1 slice toast
- Butter
- 1-4 t. grated cheese
- Cayenne or mustard

Method:

1. Butter the cracker or toast, then spread it with cheese.
2. Sprinkle toast with cayenne or mustard, and heat it in a slow oven 2-3 min., or until the cheese is melted and slightly brown.
3. Serve with salad or soup.

Note:

Cheese in various forms is frequently served with salads. Its use with light salads is excellent in that the protein and fat of the cheese supplement the juicy vegetables. Cheese is served by itself, or in hot or cold cheese mixtures; note the following suggestions:

- a. Cheese of any kind may be served with toasted or untoasted wafers.
- b. Soft cream cheese, sliced or made into little balls, is passed to the guest or placed on the salad plate. If desired, season the cheese before serving it by adding any of the following ingredients, chopped:

- | | |
|-----------------------|---------------------|
| Beets | Olives |
| Chives | Pimentos |
| Egg yolk, hard-cooked | Radishes |
| Nuts | Sweet green peppers |

If desired, roll the balls in chopped parsley or chives, or tint them a delicate green by means of spinach extract.

Cheese Straws**Ingredients:***(25-30 straws)*

2 t.	$\frac{1}{8}$ c. bread flour
dash	$\frac{1}{8}$ t. salt
spk.	dash of cayenne or white pepper
$1\frac{1}{3}$ tb.	$\frac{3}{4}$ - $1\frac{1}{4}$ c. soft bread crumbs, or enough for a roll dough
2 t.	$\frac{1}{8}$ c. grated cheese (such as American)
$\frac{3}{4}$ t.	2 tb. milk
$\frac{3}{4}$ t.	2 tb. egg, beaten very light
$\frac{1}{4}$ t.	2 t. butter, melted and cooled

Method:

1. Mix the dry ingredients.
2. Add dry ingredients to the wet ingredients and mix well.
3. Roll dough to $\frac{1}{8}$ " thickness, and cut it in strips $\frac{1}{4}$ " \times 6" by means of a cheese-straw cutter or a sharp knife.
4. Place straws on lightly floured tins and bake them in a moderate oven 15-25 min., or until they are light brown. (Why not a hot oven?)
5. Serve hot and crisp with salad or soup.

Notes:

1. This recipe furnishes a good means of using stale bread.
2. Use 1 tb. extra flour for the board and rolling pin but use no more than this, else the straws will be heavy. The addition of extra bread crumbs does no harm.
3. Cheese crackers are made by cutting the rolled dough in 1"-2" squares.
4. Richer straws are made as follows:
 - a. Roll plain pastry or puff-paste dough to $\frac{1}{4}$ " thickness, then cut the sheet in halves.
 - b. Sprinkle one half with a thick layer of grated cheese.
 - c. Cover it with other half of dough, and press the two together with a rolling pin.
 - d. Cut in strips with a cheese-straw cutter, and bake.

CARBOHYDRATE-FOOD SALADS¹

A spring luncheon

Cream of asparagus soup

Cheese

Bread and butter

Fruit salad

Marguerites

FRUIT SALADS

Recipe I

Method:

1. Place the lengthwise halves of a small peeled banana on a crisp leaf of head lettuce.
2. Sprinkle the halves with a little lemon juice, and roll them in very finely ground nuts, such as Brazil, pecan, or pistachio. (Grape-nuts are a possible substitute for nuts.)
3. Garnish with mayonnaise.

Recipe II (Waldorf Salad)

Method:

1. Mix together the following ingredients:
 - 1 c. raw tart apple } cut in slices or cubes
 - 1 c. raw celery }
 - 2-3 tb. chopped nuts (such as pecans or English walnuts)
 - Mayonnaise or cooked dressing
2. Place the mixture on lettuce and garnish with extra dressing and chopped nuts.

Recipe III

Method:

1. Mix together the following:
 - Small cubes or balls of raw apple or peach
 - Slices of banana
 - Sections of grapefruit
 - Lemon juice
2. Place the mixture on head lettuce or cress, add French dressing, and garnish with sliced almonds.

¹Certain of the recipes given are composed of very light and juicy fruits. It is a question whether such salads might better be classed as appetizer salads.

Recipe IV**Method:**

1. Chill the following in separate bowls:
 - Sections of orange (blood orange is especially pretty)
 - Sections of grapefruit
 - Small balls of muskmelon or watermelon (cut with a French vegetable-cutter)
 - White or red California grapes (cut in halves and seeded)
2. Mix the fruits, place the mixture on lettuce, and sprinkle with salt.
3. Add French dressing, or mayonnaise mixed with cream.

Recipe V**Method:**

1. Prepare a mixture of almost any number of kinds of fresh fruits (sliced except in the case of berries), selected from the following list:

Apples	Oranges
Bananas	Peaches
Blackberries	Pears
Cherries	Pineapple
Grapefruit	Raspberries (very desirable)
Grapes, California	Strawberries
Kumquats	Tangerines
Loganberries	Etc.

2. Mix whipped cream and a little sugar with the fruit.
3. Chill, and serve on lettuce.

Note:

It is not necessary to add lemon juice or salad dressing to this salad, since the fruit itself is sufficiently acid.

Recipe VI**Method:**

1. Slice the following fruits about 1 hr. before serving, mix well with the juice of 1 lemon, and chill:
 - 4 bananas
 - 2 oranges
 - 1 pineapple
 - A few dates
2. Beat the following together until mixture is very light:
 - 2 yolks of eggs
 - $\frac{3}{4}$ c. powdered sugar
 - Dash of salt
3. Just before time for serving, drain the juice from the fruit, add it to the yolk mixture, and beat until dressing is foamy.
4. Mix this dressing with the sliced fruit, and serve as cold as possible.

Recipe VII**Method:**

1. Place any one of the following fruits in a bed of head lettuce:

Circular slice of pineapple	} canned or fresh
Half a peach	
Half an apricot	
Half a pear (stuck full of almonds)	

2. To 1 c. very thick mayonnaise or cooked dressing add the following:

$\frac{1}{2}$ c. nuts, chopped
 12 marshmallows, cut in small pieces
 1 c. whipped cream

3. Add a little of the dressing to each piece of fruit, and garnish with paprika.

4. On the side of plate place a small ball of cottage or cream cheese rolled in ground nuts, and fit around it a small ring cut from a slender, sweet green pepper.

Notes:

1. Use French dressing, if preferred.
2. An additional garnish for the slice of pineapple is prepared as follows:
 - a. Place sections of grapefruit across the fruit.
 - b. Add fragments of blood orange, or peeled and seeded California grapes.

Miscellaneous Combinations for Fruit Salads

(Where not specified, lettuce and dressing are understood in each of these.)

1. Half a grapefruit (seeds removed and sections loosened), a narrow strip (or ring) of sweet green pepper fitted just inside the rind
2. A bright red apple (cored, but not pared, then filled with pearl onions and celery), head lettuce, mayonnaise
3. White grapes, oranges, bananas, pineapple, nuts
4. White grapes, oranges, cherries, celery, nuts
5. White grapes, oranges, dates
6. Pineapple, oranges, marshmallows, nuts
7. Dates, prunes, bananas, nuts, lemon juice
8. Peaches or pears, sour cherries, pineapple
9. White cherries, nuts

General Notes on Fruit Salads**I. Fruits:**

1. Almost any fresh raw fruit may be used for salad, with the possible exception of some of the berries. No set recipes can be given for salads, but it is almost impossible to make any combination of fruits that is not satisfactory. Cooked fruits are sometimes used, for example:

Peaches, halved
 Apricots, halved
 Cherries

2. General preparation of raw fruits is as follows:

- a. Cut fruit as desired, then place it on ice in its own juice.
- b. When it is very cold, drain it and add a dash of salt, also a very little sugar.
- c. Add dressing, and serve at once.

Apples or other fruits that discolor in the air should be sprinkled with lemon juice in the very beginning.

II. Dressings:

1. A little sugar is sometimes used in dressings, also paprika; seasonings in general, such as mustard and onion juice, are not used. Lemon juice is preferable to vinegar in all dressings for fruit salads. Plain or whipped cream is often mixed with the dressings.

2. The following six dressings, all but the first two of which are uncooked, are the chief ones used in fruit salads:

- a. Cooked dressing of the usual type
- b. Cooked dressing containing maple sirup or honey (see recipe, page 183)
- c. French dressing. This is often the most desirable dressing when a single fruit is served on lettuce or cress. Any one of the following raw fruits is good thus served by itself with French dressing:
Orange, tangerine, or kumquat (sliced)
Grapefruit (by itself or with cherries)
Banana, rolled in ground nuts
Pineapple, grated
Alligator pear
Sour apple
- d. Mayonnaise
- e. Whipped cream mixed with little or no sugar (good with very acid fruit)
- f. Whipped cream mixed with various ingredients, for example, in the following proportions:
 $\frac{1}{4}$ c. whipped cream
2 yolks of eggs, beaten very light
3 tb. lemon juice
3 tb. powdered sugar
Dash of salt

III. Miscellaneous points:

1. Many fruit salads have considerable energy value because they are so rich in sugar and fat.

2. Sliced marshmallows are often a good addition to a fruit salad.

3. Note the following suggestions as to sandwiches to be served with fruit salads:

White bread with English, or unsalted, butter

White bread with salted butter

Bread, white or brown, with jelly or preserves

Brown-and-white-bread ribbon sandwiches

White bread with flower petals, for example, rose, nasturtium, or violet

Steamed brown bread or raisin bread with a filling made by whipping the following together:

Nuts, chopped

Cream cheese

Cream, whipped

VEGETABLE AND STARCHY-NUT SALADS

The following salads, as well as those salads for which recipes are given below, possess considerable energy value:

Peppers (stuffed with peas, cucumbers, radishes, and mayonnaise or French dressing), lettuce

Boiled beets (chopped, and mixed with mayonnaise or cooked dressing), lettuce

String beans, carrots, beets, potatoes, peas, cooked or French dressing, lettuce

Equal parts of string beans and peas, lettuce, mayonnaise

Potato Salad

Ingredients:

1 h. tb.	2 c. cooked potatoes, sliced or cut in $\frac{1}{2}$ " cubes
	French dressing:
1 t.	5 tb. oil, melted butter, or bacon fat
$\frac{1}{8}$ t.	3 tb. lemon juice or vinegar
1 t.	$\frac{1}{2}$ onion, minced, or $\frac{1}{2}$ -1 t. juice
dash	$\frac{1}{2}$ t. salt, or to taste
dash	$\frac{1}{4}$ t. paprika
1 leaf	Lettuce
1 t.	Cooked salad dressing or mayonnaise

Method:

1. Marinate the potatoes; that is, mix them with the French dressing and let them stand $\frac{1}{4}$ -1 $\frac{1}{2}$ hr. Do not chill. (Why?)
2. Drain off excess dressing, and chill.
3. Add onion, salt, and pepper, and place potatoes in a mound on lettuce.
4. Add cooked dressing or mayonnaise. Garnish.

Notes:

1. Any of the following potatoes may be used in making salad:

Hot, freshly boiled potatoes

Cold boiled potatoes

Baked potatoes, hot or cold

Pupil to test all. Which is the best?

2. Note possible additions (chopped, cubed, or sliced) for use in the salad proper or as a garnish:

Apples

Carrots

Celery

Cucumbers

Eggs, hard-cooked

Green peas

Ham or other meat

Nuts

Olives (green, ripe, or pimento)

Parsley (sprigs or chopped)

Pickled beets or other pickles

Pimentos

Radishes ("roses" pretty as garnish)

Sweet green peppers

The given recipe for salad is made into a fair meal in itself by the addition of meat, eggs, or other protein food.

3. The following salad combinations are suggested:

- a. Potatoes, eggs, French dressing
- b. Potatoes, mayonnaise
- c. 1 c. potatoes, $\frac{1}{2}$ c. green peas, $\frac{1}{2}$ c. carrots, seasonings, dressing
- d. 1 large carrot
1 large potato
1 large beet
3 eggs
 $\frac{1}{4}$ c. capers
 $\frac{1}{2}$ c. olives, sliced thin
Mayonnaise

Boil the first four ingredients, chill, and cut in $\frac{1}{2}$ " cubes. Mix with the other ingredients, and serve on lettuce.

4. A good salad results from the substitution of boiled celery root for the potatoes of potato salad.

Sweet-Sour Potato Salad

Method:

1. Make a sweet-sour sauce by boiling the following ingredients together for a few seconds:

- 5 tb. small cubes of bacon, sautéed until brown
- 3 tb. vinegar
- 1-2 t. sugar, or to taste
- $\frac{1}{16}$ t. paprika

2. Add the following to the sauce:

- $1\frac{1}{4}$ c. of $\frac{1}{4}$ " cold potato cubes
- 2 tb. minced onion
- 1 tb. chopped pimento

3. Mix well, drain, place on lettuce, garnish, and serve at once.

Notes:

- 1. Pure bacon fat may be substituted for the cooked cubes of bacon.
- 2. The sweet-sour sauce is similar to French dressing.

Chestnut Salad

Ingredients:

- 1 c. raw-apple slices
- 1 c. celery
- 1 c. boiled French chestnuts, sliced
- Mayonnaise or French dressing, highly seasoned
- Lettuce

Method:

- 1. Mix the first four ingredients, chill, and serve on lettuce.
- 2. Garnish with slices of red apple which has not been pared.

Notes:

1. Prepare the chestnuts as follows:
 - a. Shell, parboil, and skin chestnuts.
 - b. Boil 12 min., or until chestnuts are soft, but not broken.
 - c. Drain, cool, and cut them into thin slices.
2. From the nutritive point of view nuts may be classified as follows:
 - a. Nuts of high protein and fat content, such as:
 - Almonds
 - Brazil nuts
 - Peanuts
 - Pine nuts
 - b. Nuts of low protein and fat content, but richer in carbohydrate, such as:
 - Chestnuts
 - Coconuts
 - Lichi nuts

Most nuts are members of class *a*.

3. Are coconuts and lichi nuts suitable for use in salads?

PROTEIN-FOOD SALADS

Luncheon

Fish salad

Baking-powder biscuits

Floating Island

Creamed potatoes

Radishes

Possible combinations and recipes for protein-food salads are as follows (salad dressing is understood in each of the fish salads listed):

FISH SALADS

1. Fish, celery, green pepper, olives, nuts (chop the last four foods)
2. 2 c. fish, 1 c. celery or cucumber, 2 tb. grated onion
3. 2 c. fish, 1 c. celery cut fine, $\frac{1}{2}$ doz. sour pickles
4. Tomato cups filled with 2 c. fish, 1 c. chopped celery, pulp of 3 tomatoes
5. Fish, white asparagus (placed on fish)

Notes:

1. In these five salads use either canned tuna or salmon or halibut or any other left-over cooked fish. Flake or shred the fish, then mix it and all the other ingredients with mayonnaise and serve on lettuce. (Drain oil from canned fish before shredding it.)
2. Cooked fish only is used in salads; note the possibilities:
 - Canned tuna or salmon (tuna is a good chicken substitute)
 - Canned sardines (serve with cooked dressing)
 - Cold, left-over cooked fish of almost any kind (such as white fish or halibut)
 - Crabs, lobsters, oysters, scallops, or shrimps

MEAT SALADS

1. Equal quantities of chicken, cucumber, peas, and walnuts, mayonnaise
2. Chicken, celery, head lettuce, mayonnaise
3. $1\frac{1}{2}$ c. chicken, $1\frac{1}{2}$ c. celery, $\frac{1}{2}$ c. nuts, $\frac{1}{4}$ c. olives, cooked dressing
4. Molded spinach, placed on a circle of cooked ham and garnished with slices of egg, French dressing
5. 1 c. sweetbreads (parboiled), 1 c. peas or cucumbers, mayonnaise or French dressing
6. Sweetbreads, hard-cooked eggs, celery, mayonnaise

Notes:

1. Cooked meats only are used in salads; note the possibilities:
 - White meats (prettier than dark meats for salads, but not essential):
 - Breast meat of chicken or turkey
 - Chicken substitute (such as roast veal or pork)
 - Sweetbreads
 - Calves' brains
 - Almost any other kind of cold meat

2. The following sandwiches are especially good to serve with meat salads:

Cress	Olive
Endive	Onion, Spanish
Horse-radish	Pimento
Lettuce	Bread and butter:
Mint	White bread
Mustard	Rye bread
Nasturtium-seed	Rye bread (pumpernickel)

Various combinations are possible for use as sandwich fillings, for example:

Nuts, pimento-olives, Spanish onions, cream cheese, and whipped cream
Lemon-mayonnaise, pimentos, Spanish onions, and paprika

CHEESE SALADS

- 1 c. American cheese cut in small cubes, 1 c. peas, cooked dressing
- Riced cream cheese, pecans, mayonnaise
- Cottage cheese, boiled chestnuts, cooked dressing
- Nuts, olives, cream cheese, mayonnaise
- Cottage cheese, cabbage, French dressing
- Triangular strips of sweet green pepper filled level full of cream cheese, head lettuce, cooked dressing, pimento as a center garnish
- Cottage or commercial cream cheese (made into small balls or formed into a roll and sliced), head lettuce, French dressing
- Bird's-nest salad: Head lettuce hearts with eggs of cream cheese buried within them, slices of pimento, French dressing

USES OF CHEESE IN THE DIET: A SYNOPSIS

1. Cheese served in larger quantities is valued more for nutriment than for flavor; that is, it is used as a meat substitute, or the chief dish of a meal.

2. Cheese served in smaller quantities is valued more for flavor than for food value; it is used as an incidental part (appetizer, relish, or condiment) of the meal.

Notes:

1. Pupil to show that dishes such as the following, when made with cheese, often serve either as meat substitutes or as appetizers, according to conditions:

Balls and croquettes	Salads
Creamed dishes (vegetables, "rabbit," etc.)	Sandwiches
Custards	Soufflés (fondues, etc.)
Escalloped dishes (macaroni, etc.)	Soups
Pastry (such as straws)	Etc.

2. Cottage cheese and commercial cream cheeses are served in any of the following ways:

- Filling for sandwiches (These cheeses, especially buttermilk cottage cheese, are so smooth in texture that they can easily be spread on bread, either with or without butter.)
- As a main luncheon or supper dish (cheese used as a meat substitute)
- As a relish with other courses, such as the salad course
- As a part of a salad

NUT AND DRIED-LEGUME SALADS

1. Nuts, canned or freshly cooked lima beans, celery, cooked dressing
2. Nuts, peas, cooked or French dressing
3. 1 c. blanched almonds cut lengthwise, 1 c. olives cut lengthwise, French dressing
4. Peanuts, green peas, celery, cooked dressing
5. A small can baked beans with tomato sauce, 1 small head of lettuce, 1 small onion, salt and paprika, French dressing

Notes:

1. Nuts, when purchased shelled, should be sterilized before being used. Pour boiling water over them, let them stand a minute, and drain them. (The washing of the nuts also adds to their appearance and removes any acrid taste.)
2. Either roasted peanuts or raw peanuts, boiled until tender, may be used in salad.

EGG SALADS

Note three typical recipes for salads prepared from hard-cooked eggs:

Recipe I**Method:**

1. Cut a hard-cooked egg in halves lengthwise.
2. Place one half in the center of a bed of head lettuce.
3. Add French dressing and slices of pimento-olive.

Recipe II**Method:**

1. Arrange lettuce on a plate and on it make a nest of chopped whites of eggs.
2. Place a whole yolk of egg in the center, then add salad dressing.

Note:

Two possible variations are as follows:

- a. Make a nest of yolk put through a ricer, and garnish with chopped white.
- b. Slice the white and mix with cucumbers and celery.

Recipe III (Daisy Salad)**Method:**

1. Imitate the petals of a daisy by any of the following agents:
 - a. Several 2" pieces of celery split lengthwise two or three times
 - b. Slices of white of egg prepared as follows:
 - (1) Cut hard-cooked eggs in half lengthwise.
 - (2) Remove yolks, and slice whites in long thin slices.
 - c. Quarters of stuffed eggs prepared as follows:
 - (1) Cut hard-cooked eggs in half lengthwise.
 - (2) Remove yolks and season them well with butter, salt, and lemon juice; return yolks to whites. Cut each half of egg in half.
2. Arrange in a circle on lettuce any kind of "petals," imitating the petal formation of a daisy.
3. Fill the center with hard-cooked yolk put through a ricer or a sieve.
4. Add dressing, French, cooked, or mayonnaise, and garnish with parsley.

COMPLETE-DISH SALADS

Luncheon

Chicken broth

Rice and egg salad

Stewed figs, stuffed with nuts

Wafers

Olive sandwiches

Rice Salad

Ingredients:

1 c. cold boiled or steamed rice

Salad dressing (mayonnaise, French, or cooked)

1 c. protein food—one or any suitable combination of the following:

Hard-cooked eggs

Cooked meat cut in small cubes (such as chicken, ham, or roast pork)

Fish, boned and shredded (such as cold-boiled cod, salmon, or tuna)

Method:

Mix all the ingredients, place them on lettuce, and garnish with celery tips, etc.; or pack in molds wet with cold water, chill, and turn out on lettuce.

Notes:

1. Potatoes, chestnuts, or other starchy food may be substituted for rice in this salad.
2. Good salads can be made of rice combined with left-over vegetables, such as celery.

Stuffed-Tomato Salad

Method:

1. Scald a medium-sized tomato for a few seconds in boiling water, plunge it into cold water, then peel and chill it.

2. Form a cup by cutting a thin slice from the stem end and then scooping out all the pulp.

3. Fill cup with a chilled and well-salted mixture composed of the following:

Nuts or meat chopped (chicken or sweetbreads are very good)

Rice, cooked

Choice of the following:

Celery cut in $\frac{1}{4}$ " dice

Cucumbers, sliced

Cabbage, chopped

Peas, green

Dressing, cooked or mayonnaise

Etc.

4. Place on head lettuce and garnish with cooked or mayonnaise dressing.

Asparagus Salad*(Recipe I)***Method:**

1. Form a cup by scooping out the center from a tomato.
2. Place it on head lettuce, and stand in the cup three or four 3" pieces of white asparagus, tip ends.
3. Place more asparagus on plate.
4. Add French dressing and bits of sweet green pepper.

Note:

Serve cheese molds with this recipe and with each of the following salads.

Asparagus Salad*(Recipe II)***Method:**

1. Cut rings $\frac{1}{4}$ "- $\frac{1}{3}$ " wide from any one of the following medium-sized vegetables:

Pimento

Ripe tomato

Sweet pepper (green or red)

2. Slip through each ring three or four stalks of white asparagus.
3. Place a ring on each plate of head lettuce.
4. Add French dressing.

Asparagus Salad*(Recipe III)***Method:**

1. Place three or four stalks of canned asparagus on a plate of head lettuce or endive.
2. Garnish with strips of sweet red pepper or pimento.
3. Add French dressing containing a little chopped green and red pepper.

Cheese Molds**Ingredients:**

$\frac{1}{4}$ t.	$\frac{3}{4}$ tb. granulated gelatin
$\frac{1}{2}$ t.	2 tb. cold water
1 t.	2 tb. boiling water
1 t.	2 cream cheeses (such as Neufchâtel or Blue Label)
1 t.	$\frac{1}{2}$ c. American cheese, grated
1 tb.	1 c. cream, measured after being whipped stiff
dash	$\frac{3}{4}$ t. salt
spk.	Paprika
$\frac{1}{4}$ t.	2 tb. chopped pimentos or red and green pepper

Method:

1. Soak the gelatin 3-5 min. in cold water, then dissolve it in boiling water.
2. Cream both kinds of cheese with a little of the cream.
3. Add the dissolved gelatin to the cheese.
4. Add all the other ingredients, folding in the remainder of cream the last thing.
5. Mold in small cups, chill, and turn one out upon side of each plate of salad.

Miscellaneous Combinations for Complete-Dish Salads

1. Cooked beets (hollowed out and stuffed with chicken, onion, celery, and cooked dressing), lettuce
2. Lettuce, equal parts of celery and nuts (such as almonds, pecans, walnuts, etc.), French dressing
3. Prunes stuffed with cream cheese, pimentos (as garnish), French dressing or mayonnaise
4. Boiled noodles or other flour paste, boiled eggs or roast chicken, lettuce, mayonnaise

COOKED SALAD DRESSINGS

GENERAL OUTLINE

I. Types of dressings:

1. Thickened by egg only
2. Thickened by both starch and egg. Note the following points
 - a. Most cooked dressings are of this type.
 - b. It is a less expensive type than No. 1.
 - c. The ratio of the starch to the egg may be varied at will; use 1 tb. flour in place of each yolk that is omitted. The less egg used, the cheaper the dressing, but too much starch should be avoided, else the flavor of dressing will be injured.
 - d. Either of the following forms of starch may be used:
Flour (wheat, rice, etc.)
Cornstarch

In salad dressings (as well as in cooking in general) 1 whole egg may always be substituted for 2 yolks, since they are of equal thickening value. Yolks alone produce a much smoother dressing than whole egg. (Why?) The yolks of eggs should not be beaten, else part of their thickening value will be destroyed.

II. Liquids used in dressings:

1. Non-acid liquids (used singly or in combination):

Water	Cream, sweet
Milk, fresh (whole or skim)	Stock, meat
Milk, condensed or evaporated	Stock, vegetable
2. Acid liquids (used singly or in combination):

Vinegar (see list of varieties, Note 1, page 164)
Lemon juice (for other possible fruit acids, see Note 1, page 164)
Sour cream
Whey

Salad dressings made with water are just as satisfactory as those made with milk, and less expensive. If a less acid dressing is desired, reduce the quantity of vinegar and make up the deficiency in liquid with water. In nearly all, if not all, cooked dressings, lemon juice may be substituted for part or all of the vinegar. Various kinds of vinegar and acid fruit juice may be used.

III. Fats used in dressings:

- | | |
|-----------------------|-------------------------------------|
| Butter | Corn oil |
| Oleomargarine | Cottonseed oil (such as Wesson oil) |
| Nut margarine | Olive or peanut oil |
| Chicken or turkey fat | Salmon oil (good in salmon salad) |

IV. Seasonings used in dressings:

1. Powdered seasonings; see list, page 164. Sugar (or honey or maple sirup) is often used in dressings for fruit salads.
2. Vegetables, pickles, and miscellaneous additions; see lists, page 164. Whipped cream or beaten white of egg is often added.

Notes:

1. The following dressings are derived, as a rule, from mayonnaise, but they may also be derived from cooked dressing:

Russian dressing
Thousand-island dressing
Sauce tartare

Pupil to determine which of the following seasonings are added to either mayonnaise or cooked dressing in making each of the foregoing derivatives:

Chili sauce

Worcestershire sauce

Chopped ingredients:

Capers	Parsley
Chives	Peppers, green
Olives	Pickles
Onions	Pimentos

2. Cooked dressings are derivatives of soft custard, made by the addition of acid to soft custard.

3. Cooked dressings, as a rule, have the following advantages over mayonnaise and French dressing:

They are less expensive.

They may be bottled and kept for a longer time.

**STANDARD METHOD FOR COOKED DRESSINGS THICKENED
BY BOTH STARCH AND EGG**

1. Make a soft custard in a double boiler, using egg, milk or water, and sugar.
2. Using direct heat, make a sauce from the remaining ingredients—fat, flour, seasonings, and vinegar; sometimes the liquid will include stock, water, etc. Cook the sauce as follows:

a. Add the dry ingredients to melted butter or other liquid fat.

b. Add vinegar and cook until mixture is as thick as very heavy cream.

For other possible methods for the sauce, see *Food Economy*, pages 70–71.

3. Combine the custard and the sauce, following the general rule for all cooking, that is, the addition of the thinner to the thicker mixture.

4. Beat well, strain if necessary, and cool.

Note:

The following are reasons for the preference of the foregoing method to the various other possible methods for cooked dressing:

Starch and egg are cooked separately.

Milk is cooked with other ingredients before acid is added to it, and so does not curdle.

COOKED DRESSINGS

Recipe I

Ingredients:

$\frac{3}{4}$ t.	$\frac{1}{2}$ c. bread flour
$\frac{3}{4}$ t.	$\frac{1}{2}$ c. sugar
$\frac{1}{16}$ t.	2 t. salt
dash	$1\frac{1}{2}$ t. dry mustard
$\frac{1}{2}$ t. yolk	5 yolks of eggs
1 tb.	2 c. cold water
1 t.	$\frac{3}{4}$ c. strong vinegar

Method:

Prepare the dressing by either the standard method or the following method:

- Mix the four dry ingredients with the yolks of eggs.
- Slowly add the water and vinegar, and stir to make a smooth mixture.
- Stir the mixture in a double boiler until it is almost as thick as a drop batter.

Notes:

- The large recipe yields $2\frac{3}{4}$ c. dressing; the class recipe yields $1\frac{1}{2}$ tb. dressing.
- The recipe will keep a month if packed in a glass jar and kept in a refrigerator.
- Before serving the dressing, it is well to thin it with milk or cream (whipped or not) and to add sugar to taste.

Recipe II

Ingredients:

$\frac{1}{4}$ t.	1 tb. flour
$\frac{3}{8}$ t.	$1\frac{1}{2}$ tb. sugar
$\frac{1}{8}$ t.	$\frac{1}{2}$ tb. salt
$\frac{1}{16}$ t.	$\frac{3}{4}$ t. mustard
spk.	Dash of cayenne or paprika
spk.	Dash curry
$\frac{1}{2}$ t.	2 yolks of eggs, slightly beaten
1 tb.	$\frac{3}{4}$ c. milk
$\frac{3}{8}$ t.	$1\frac{1}{2}$ tb. butter, melted and cooled
$\frac{3}{4}$ t.	3 tb. strong vinegar

Method:

Prepare the dressing by either the standard method or the following method:

- Mix the first six (dry) ingredients.
- Mix the yolks of eggs, milk, and butter.
- Add a little of the wet ingredients to the dry ingredients, mix to a smooth paste, then add remainder of wet ingredients and stir well.
- Slowly add the vinegar.
- Stir the mixture in a double boiler until it is as thick as very heavy cream, then strain, and cool.

Notes:

1. The large recipe yields $\frac{3}{4}$ c. dressing; the class recipe yields 1 tb. dressing.
2. Add whipped cream before serving, if desired.

Recipe III**Ingredients:**

1 tb.	$\frac{3}{8}$ c. bread flour
1 tb.	$\frac{3}{8}$ c. sugar
dash	$\frac{3}{8}$ t. salt
1 tb.	$\frac{3}{8}$ c. water
2 tb.	$\frac{3}{8}$ c. vinegar
1 t.	$\frac{3}{8}$ c. lemon juice
1 t.	3 yolks of eggs, beaten very light
1 tb.	3 whites of eggs, beaten stiff

Method:

1. Mix dry ingredients.
2. Gradually add water, vinegar, and lemon juice, and stir the mixture in a double boiler to make a thick sauce almost as stiff as biscuit dough.
3. Fold the beaten yolks into the beaten whites.
4. Beating the eggs constantly, gradually whip the cooked mixture into the eggs.

Notes:

1. The large recipe yields $2\frac{1}{4}$ c. dressing; the class recipe yields $4\frac{1}{8}$ tb. dressing. Substitute vinegar for the lemon juice in the class recipe, if desired.
2. This is a unique recipe; mix it by the foregoing method, not by the standard method.
3. The recipe is delicious and inexpensive, and is so much like mayonnaise that it is called mock mayonnaise. If desired, beat olive oil into the dressing just before it is served.

Recipe IV*(Especially for fruit salads)***Ingredients:**

$\frac{3}{4}$ t.	4 yolks of eggs, beaten slightly
dash	1 t. salt
dash	Paprika
1 t.	2 tb. butter or a substitute
1 t.	2 tb. strained honey
$\frac{1}{2}$ –1 t.	2 tb. lemon juice (or vinegar)
2 t.	1 c. whipped cream (measured after whipping)

Method:

1. Mix all the ingredients except the cream and stir them in a double boiler until mixture is creamy.
2. Chill mixture. Fold in the cream just before serving.

Notes:

1. Granulated sugar or maple sirup or sugar may be substituted for honey.
2. The following is a similar recipe:
 - a. Mix together the following ingredients:
 - 2 yolks of eggs, beaten slightly
 - $\frac{1}{4}$ t. salt
 - Paprika
 - 1 tb. flour
 - 1 tb. sugar
 - b. Add $\frac{1}{2}$ c. maple sirup or strained honey and the juice of $1\frac{1}{2}$ lemons.
 - c. Cook mixture 6-8 min. over a low flame, or 15 min. in a double boiler, then cool and fold in 1 c. whipped cream.

DESSERTS

POPOVERS (STUFFED) AND CREAM PUFFS

The sudden expansion of water into steam is the chief leavening agent in the baking of all hollow flour mixtures, such as popovers, Yorkshire pudding, and cream puffs. Air expansion may be more or less of a consideration in the leavening of such mixtures. (Study synopsis of viscous substances, pages 203-205.)

Yorkshire pudding is a plain derivative of popovers, and cream puffs are a fancy derivative of popovers. Pupil to compare recipes for these three flour mixtures (see any standard cookbook for Yorkshire pudding).

Popovers

(4-6 popovers)

Ingredients:

2 tb.	1 c. bread flour
dash	$\frac{1}{4}$ t. salt
2 tb.	1 c. milk
2 t.	1 egg
$\frac{1}{8}$ t.	1 t. butter or a substitute, melted (see Note 1)

Method:

1. Sift the flour and salt together once.
2. Add the milk to the unbeaten egg.
3. Gradually add the wet ingredients to the dry ingredients. Mix very gradually, else lumps will form; if lumps do form, use a Dover beater for a short time. Employ no more beating than with muffins; that is, beat just long enough to make a smooth thin batter; it is not necessary to beat 3-5 min. with a Dover beater. (See Note 2.)
4. Add melted fat.
5. Heat glazed popover cups in the oven, then grease them, and fill them two-thirds full of batter. (See Note 5.)
6. Bake batter as follows, allowing 45 min. as the average total time required:
 - a. Place cups in a very hot oven (480° F., or 250° C.) until batter has risen (or popped) very high.
 - b. Reduce heat to a moderate temperature (356° F., or 180° C.) for the remainder of the time.

At the end of 45 min., or when the popovers are apparently baked, set the oven door ajar and allow the popovers to remain in the oven until they are very brown and shiny on the bottom and crisp throughout. Popovers that are soft or raw inside are not good.

7. Serve at once. Why? (See Note 6.)

Notes:

1. Fat adds to the crispness of popovers, but keeps them from rising so high. If the cups are especially well greased, it is not necessary to add any fat to the batter.

Experiment: Prepare three batches of the foregoing large recipe, using 0 t. fat, 1 t. fat, and 3 t. fat respectively in the three batches. Bake, and note comparative height of the popovers.

2. Many cooks in former times beat popover batter 3-5 min., but it has been proved that it is a waste of time and energy to beat the batter, since beaten and unbeaten batter give practically the same amount of expansion in the same oven heat.

3. It has also been proved that it is not necessary to hurry the batter into the oven at once; it may stand several hours — even all day or all night.

4. Avoid cooling or jarring the oven while the popovers are baking; do not open oven door often. (Why?)

5. The regular brown or white earthen popover, or custard, cups with the rounded bottoms are better than tin baking dishes.

6. Popovers are good served in any of the following ways:

a. As breakfast bread

b. As the main course of a luncheon or supper. Stuff a popover with creamed chicken or other protein food (see *Food Economy*, page 64).

c. As luncheon or dinner desserts (especially useful in children's diet):

a. Popover served with a pudding sauce

b. Popover split in halves, one half filled with any of the following, then the other half added as a cover:

Fresh fruit crushed with sugar (such as strawberries)

Canned or stewed fruit (peaches, cranberries, etc.)

Jelly, jam, or marmalade

Whip (see pages 195, 198, and 200)

Etc.

A pretty effect results if the popover is filled through a small hole in the top; do not close the hole, but allow a little of the filling to be seen as a garnish.

Cream Puffs

Ingredients:

(8 puffs)

2 t.	4 tb. butter (or a substitute, such as butterine or Crisco)
3 tb.	1 c. hot or cold water
$\frac{1}{8}$ t.	1 t. sugar
dash	$\frac{1}{4}$ t. salt
$3\frac{1}{8}$ tb.	$1\frac{1}{4}$ c. pastry flour
2 tb. slightly beaten	3 eggs, unbeaten

Method:

1. Cook the first four ingredients together until boiling begins.

2. Add the flour all at once and quickly stir over the fire until a smooth and

rather stiff ball is formed which does not stick to the spoon or the saucepan; do not cook beyond this point, else the ball will become oily and the puffs be unsuccessful. It is well to use a wooden spoon for stirring purposes.

Caution: Do not add the flour until the liquid is really boiling, that is, full of large bubbles.

3. Remove the mixture from the fire, and while it is still hot add the unbeaten eggs, one at a time; use a heavy fork, and beat in each egg very thoroughly before adding the next one.

4. Beat the paste hard 3-4 min. with a heavy fork until all of the following tests hold true:

- a. Numerous stiff projections stand up of themselves from the paste.
- b. Paste may be cut with a knife in clean-cut sections.
- c. Paste is glossy in appearance like mayonnaise.

5. Drop in semi-rough 2" balls ($1\frac{1}{2}$ " apart) from a pastry bag or spoon upon greased tins or baking sheets.

6. Bake batter as follows, allowing 25-30 min. for the total process, and using the same temperature rules as for popovers:

- a. Place batter in a very hot oven (480° F., or 250° C.) for about 15-20 min., or until puffs have risen very high.
- b. Reduce heat to a moderate temperature (356° F., or 180° C.) for the remainder of time, that is, until puffs are very firm and light brown.

When they are done, set the oven door ajar and allow puffs to remain in the oven for a short time. (Why is gradual cooling essential?)

7. Just before serving and when they are cold, cut the puffs in halves and fill them with one of the following, or fill through a small hole, using a tin or paper funnel:

- Soft custard, made with a little cornstarch (see page 188)
- Cream-pie filling (any type)
- Whipped cream, sweetened and flavored with extract
- White-of-egg whip (see page 195)
- White-of-egg and gelatin whip (see page 198)
- Cream whip (see page 200)
- Marmalade or stewed fruit
- Etc.

The whipped cream extends farther if one of the following is added:

- White of egg, beaten stiff
- Dissolved gelatin, beaten until frothy

8. Sprinkle with powdered sugar, and serve.

Notes:

1. The class recipe may be baked as one large puff, or as two to four little puffs.
2. Satisfactory puffs can be made by the substitution of rice flour for all the pastry flour in the recipe.
3. Another satisfactory way to bake cream puffs and popovers is to place them in a cold or slightly warm oven at first, then gradually increase the temperature.

Soft-Custard Filling for Cream Puffs**Ingredients:***(8 puffs)*

2 tb.	1 c. sugar
dash	$\frac{1}{2}$ t. salt
$\frac{1}{2}$ tb.	4 tb. cornstarch
1 tb.	2 eggs, slightly beaten
4 tb.	2 c. milk, scalded
4 d.	1 t. vanilla

Method:

1. Mix the dry ingredients, add them to the hot milk, stir the mixture in a double boiler until it is as thick as heavy cream, then cover and cook 5 min. longer.
2. Add this mixture to the eggs, and stir it in the double boiler 1-3 min. longer, or until it is almost as thick as thick batter.
3. Cool, and flavor.

Notes:

1. This method is similar to that for cornstarch mold, a pudding.
2. Do not fill the cream puffs until the filling is almost cold.

SPONGE AND ANGEL CAKES

Introductory Notes

1. Sponge and angel cakes are very light products, but are not hollow. In making both these cakes aim to secure air; to retain air; to expand air and any carbon dioxide; to change water into steam, then expand the steam. Is it true that eggs are often the chief source of water (*steam*) in sponge and angel cakes? (Study synopsis of viscous substances, pages 203-205.)

2. The two following types of recipes are given for both sponge and angel cakes:

a. More expensive, or old-time, cakes, characterized by:

Many eggs

No baking powder

b. Economical, or mock, cakes (especially useful in the winter when eggs are expensive), characterized by:

Few eggs

Baking powder

The liquid in the cakes varies as follows:

CAKES	LIQUID
Sponge	Eggs (whole)
Mock sponge	Eggs (whole) and water
Angel	Eggs (whites)
Mock angel	Eggs (whites) and milk

3. See table, page 8, for degrees of temperature for baking sponge and angel cakes. Not all cooks agree as to these temperatures; one cook recommends the following:

	°F.	°C.
Sponge cake	347-383	175-195
Angel food	347-401	175-205

Theoretically, at least, angel cake allows of a higher temperature than sponge cake, since whites of eggs stiffen at a higher temperature than the yolks.

The three following methods are possible for baking sponge and angel cakes, but the first is probably the safest for the inexperienced cook:

Steady heat (even)

Rising temperature (gradually increasing)

Falling temperature (gradually decreasing)

4. The quality of sponge and angel cakes varies largely according to the freshness of the eggs and the quantity and kind of flour used. Bakers sometimes add cornstarch to angel cake to make it tender. Explain.

5. In sifting the dry ingredients for sponge and angel cakes, hold the sifter high so as to inclose plenty of air.

6. Discuss probable reasons for the use of acid, that is, lemon juice and cream of tartar, in sponge and angel cakes respectively. (One cook asserts that cream of tartar whitens angel cake and keeps it tender and moist. Is there any truth in another's assertion that lemon juice or other acid hardens the "egg walls" just enough to keep the cakes from falling?)

7. All cooks agree that tins for angel and sponge cakes should not be greased.

8. If no frosting is spread on sponge or angel cakes, it is well to sprinkle them with a little powdered sugar.

Sponge Cake¹

Ingredients:

(No water used)

½ yolk.	5 yolks of eggs
2 tb.	1 c. sugar
¼ t.	1 tb. lemon juice
dash	½ lemon rind, grated
½ white	5 whites of eggs
2 tb.	1 c. pastry flour
dash	¼ t. salt

Method:

1. Beat the yolks with a Dover beater until they are light yellow and thick.
2. Adding the sugar in small portions, beat the sugar and yolks together thoroughly with a Dover beater until the grains of sugar disappear.
3. Add the following ingredients in the order named, then, by means of a spatula, fold in all at the same time (since the ingredients are folded in at one time, very little air is lost):

Lemon juice and rind

Whites beaten stiff and dry

Flour and salt sifted together four or five times

Fold just until the ingredients are well blended, and do not fear too little folding. Do not mix or stir.

4. Place batter in ungreased tins and bake in a steady, moderate oven, 347°–383° F., or 175°–195° C.

5. Remove cake from oven and invert tin for a few minutes.

Notes:

1. The following method, similar to the above, is much used for sponge cake:
 - a. Add sugar, salt, lemon juice, and rind to the yolks beaten until thick and lemon-colored, then beat the mixture thoroughly.
 - b. Fold in the flour previously sifted four or five times.
 - c. Fold in the whites beaten until stiff, then bake.
2. Except for the addition of sugar and flour, either method for sponge cake is somewhat similar to that for foamy omelet.
3. Angel food differs from this sponge cake in that whites of eggs only are used; hence it is often called white sponge cake.
4. Derivatives of sponge cake include the following:

Jelly roll

Lady fingers

Sunshine cake

Sponge cake is often baked in gem pans.

¹For honey sponge cake, see "Honey and Its Uses in the Home," *Farmers' Bulletin 653*, U.S. Dept. of Agri.

5. Bake the class recipe in a muffin tin or in a 5"×2½" bread tin.
6. White of egg is beaten stiff and dry when it begins to spatter in tiny flakes.
7. The following wheatless sponge cakes¹ are satisfactory:

Made with 100 per cent of any of the following flours:

Barley	Potato (an especially delicate cake results)
Corn	Rice

Made with 50 per cent cornstarch and 50 per cent potato flour.

Made with 50 per cent oat flour and 50 per cent corn flour.

Sponge cake is also good made with 100 per cent matzoh flour or meal.²

See the rules, *Food Economy*, pages 165–170, for the substitution of barley, etc., for wheat.

Mock Sponge Cake

(Recipe I—Cold water used)

Ingredients:

½ yolk	4 yolks of eggs, beaten until thick and creamy
2 tb.	1 c. sugar
½ t.	2 tb. lemon juice
1 t.	1 tb. cold water
½ white	4 whites of eggs, beaten stiff
2 tb.	1 c. pastry flour
⅛ t.	1 t. baking powder

Method:

1. Add the lemon juice and water to the yolks of eggs.
2. Add the sugar and beat well.
3. Fold in the whites of eggs.
4. Add flour thoroughly sifted with the baking powder.
5. Bake batter in a steady, slow oven in either of the following ways:
 Bake 25 min. in a shallow pan, 9"×11".
 Bake 40 min. in a loaf tin (half fill the tin with batter).
 Bake the class recipe in an ungreased bread pan, 5"×2½".

Mock Sponge Cake

(Recipe II—Boiling water used)

Ingredients:

¼ egg	2 eggs, beaten very light (do not separate the yolks and whites)
2 tb.	1 c. sugar
4 d.	½ t. vanilla
1 tb.	½ c. boiling water
2 tb.	1 c. bread flour
¼ t.	1¼ t. baking powder
dash	⅛ t. salt

¹ For further suggestions, see *Journal of Home Economics*, April, 1918, page 185; August, 1918, page 350.

² Matzoh flour or meal is made by grinding matzos, a form of unleavened crackers eaten by Hebrews during the Passover season.

Method:

1. Add sugar to the eggs and mix well.
2. Sift the remaining dry ingredients, and add them gradually; beat only long enough to blend the mixture well.
3. Stir in the flavoring.
4. Add the water. (A thin batter results.)
5. Pour batter into well-greased and floured gem pans, or into a shallow pan, and bake in a moderate oven.

Note:

This recipe, because of its velvety texture, is also good baked in a sheet and rolled as a jelly roll. The class recipe, baked in a bread tin 5"×2½", results in an excellent small roll.

Angel Cake**Ingredients:**

1 white	¾ c. whites of eggs, unbeaten (about 8 small whites)
⅛ t.	¾ t. cream of tartar
2 tb.	1 c. fine granulated sugar, sifted once
6 d.	¾ t. extract (vanilla or almond)
1½ tb.	¾ c. pastry flour, measured after one sifting
dash	¼ t. salt

Method:

1. Sift flour and salt together four times.
2. Whip the whites to a foam with a Dover beater, then add cream of tartar and beat with a Dover beater until whites are very stiff and dry; that is, beat 1-2 min. *after* a 2" finger-like projection stands up on the beater when the latter is held upright.
3. Using a light wire egg-beater, very lightly and gradually fold the sugar into the whites; do not beat or stir.
4. Using the same wire egg-beater, very lightly fold in at the one time the extract, flour, and salt.
5. Half fill an ungreased tube tin, and bake cake 40-50 min. in a very slow and steady oven; do not open the oven door until the cake is done.
6. After removing the cake from the oven, invert tin so as to keep cake from shrinking too much or becoming heavy. Cool cake, but avoid a draft.
7. When cake is cold, loosen the cake around the edge by means of a knife, then hit the pan on the table just hard enough to make the cake fall out.
8. Brush off the brown crumbs, and ice.

Notes:

1. Angel-cake recipes in general are very flexible in respect to:
 - a. Proportions of whites of eggs, sugar, and flour (Pupil to secure from standard cookbooks recipes each of which contains 1 c. whites [8 very large or 10-11 medium whites].)
 - b. Method (including temperature, etc.; see Note 3, page 189)

2. Note the following suggestions as to the class recipe:

- a. If pastry flour is not available, manufacture $1\frac{1}{2}$ tb. of it by mixing the following ingredients:
 1 tb. + $\frac{1}{2}$ t. bread flour
 1 t. cornstarch
- b. Bake the cake in a heavy tin (such as a bread tin $5'' \times 2\frac{1}{2}''$ or a 6" circular tin) or in two muffin tins.
- c. If the angel (or sponge cake) tins used in class are hard to wash, boil them clean in a solution of soap powder or sal soda.

Mock Angel-Cake

Ingredients:

2 tb.	1 c. pastry flour
2 tb.	1 c. fine granulated sugar
$\frac{3}{8}$ t.	$3\frac{1}{2}$ t. baking powder
dash	$\frac{1}{8}$ t. salt
2 tb.	1 c. scalding hot milk (not boiling)
6 d.	1 t. lemon extract
2 tb. beaten whites	2 whites of eggs, beaten stiff

Method:

1. Sift the four dry ingredients together six times.
2. Gradually add the dry ingredients to the hot milk and stir to make a smooth batter. (Do not have pan of hot milk over the fire.)
3. Add extract, then fold in the whites of eggs.
4. Pour batter into an ungreased tube tin and bake about 40 min. in a moderate oven; beware of jarring the oven.
5. Invert tin, let it stand 1 min., then turn cake out.

Notes:

1. This recipe is similar in texture to the angel cake containing no baking powder.
2. Work quickly, since the hot milk releases carbon dioxide; place the cake in oven as soon as it is mixed.
3. Note the following suggestions as to the class recipe:
 - a. If pastry flour is not available, manufacture 2 tb. of it by mixing 1 t. cornstarch with 5 t. bread flour.
 - b. Beware of scorching little cakes; use a medium oven for the full period of baking.
 - c. Bake the class recipe in one or two muffin tins; if they are new, do not grease them; if they are old, grease and flour them.

WHIPS

Whips (one type of sweet soufflé), with possible exceptions, are especially useful in the diet of children and invalids. Whips containing fruit are an excellent means of giving necessary fruit (juice, pulp, or solid fruit) to children and adults.

The four following whips, all of which are served as desserts, are named according to the chief viscous, or sticky, substance present (see page 203 for a synopsis of viscous substances):

- Whole-egg whip (steamed or baked)
- White-of-egg whip (raw, baked, or steamed)
- White-of-egg and gelatin whip (raw)
- Cream whip (raw)

Recipes for the four whips are as follows (pupils to bring from home left-over fruit pulp or juice, jelly, etc., for use in all but the first recipe):

Plain Whole-Egg Whip

Ingredients:

- 1 t. sugar
- 1 t. lemon juice
- 1 yolk of egg, beaten very light
- 1 white of egg, beaten stiff

Method:

1. Mix the sugar and acid well with the yolk of egg.
2. Fold in the white very thoroughly.
3. Place mixture in a small bowl or an egg cup.
4. Set the dish in a saucepan of boiling water, cover saucepan, remove it from the fire at once, and let it stand 5 min.
5. Remove dish of egg and serve at once.

Date or Fig Whole-Egg Whip

Ingredients:

(4-6 servings)

- | | |
|---------|----------------------------------|
| ½ tb. | ½ c. sugar |
| ⅛ t. | ½ t. baking powder |
| ½ t. | 1½ tb. flour |
| dash | ⅛ t. salt |
| 2 dates | ½ c. dates or figs |
| 2 meats | ½ c. English walnut meats |
| 3 d. | ½ t. vanilla |
| 1 t. | 1 yolk of egg, beaten very light |
| 2 t. | 1 white of egg, beaten stiff |

Method:

1. Mix the first four (dry) ingredients.
2. Grind the fruits and nuts as fine as granulated sugar, then, using the hands, blend them well with the dry ingredients. (If preferred, keep the fruit and nuts in larger pieces.)
3. Stir in the vanilla and yolk of egg.
4. Fold in the white of egg.
5. Half fill a heavy buttered baking dish, and bake mixture in a very slow oven 30-40 min., or until it is double in bulk, firm, and shrinks from sides of pan.
6. Serve hot or cold, with cream, as a dessert.

Notes:

1. This dessert is of high caloric value. It is a derivative of the preceding recipe.
2. A muffin tin is good as a mold for the class recipe. It is well, as a safeguard during the baking process, to place a basin of water beneath the tin.

White-of-Egg Whip**Ingredients:**

$\frac{1}{4}$ white	1 white of egg, chilled and unbeaten (see Note 2)
1 tb.	4 tb. chilled fruit pulp (avoid juice; see outline on fruit pulp, page 197)
1 t.	Granulated sugar to taste (about 2 tb.)
$\frac{1}{4}$ t.	Lemon juice to taste (about 1 t.)
spk.	Dash of salt

Method:

1. Mix all the ingredients in a bowl, and beat 3-10 min. with a Dover beater until the mixture is so stiff that it stands up with finger-like projections; the more beating, the more delicate the color.

2. Proceed in accordance with one of the three following methods:

- a. Heap the raw whip in a large glass dish or in individual glasses or sherbet cups, and chill.
- b. Half fill a buttered baking dish, and bake mixture in a slow oven 20-40 min., or until it is double in bulk, firm, and slightly brown. The whip is done if it rebounds when touched lightly with the finger tip. Avoid a high temperature. (Why?) (Bake the class recipe in one muffin tin.)
- c. Steam the mixture until it is light and firm.

3. Serve a raw or cooked whip by itself, or with the addition of one of the following:

Fresh fruit, sliced
 Fruit juice
 Fruit sauce
 Sugar and plain or whipped cream
 Soft custard

Serve the baked whip as soon as it is done, that is, when it is hot and twice its original bulk, or serve it ice-cold. (The cold whip is delicious, and not tough, even though contracted to its original bulk.)

Notes:

1. On an average, $1\frac{1}{2}$ c. raw whip—3 or 4 servings—result from the recipe.
2. Some cooks prefer to beat the white stiff before mixing it with the other ingredients, but doubtless this method results in a certain waste of time. Pupil to test the two methods, then compare as to size of yield, stiffness, etc.
3. The recipe is one of the most flexible of all recipes, allowing of considerable variation according to taste; for example:

Use 2 tb.—1 c. fruit pulp.

Use $0-\frac{1}{8}$ c. sugar.

Add coloring pastes.

Fold in chopped nuts.

Beat in whipped cream (cream being especially desirable when much fruit juice is used).

The following recipe for strawberry whip, which yields $1\frac{1}{2}$ c. raw whip, is an example of the use of a very large quantity of pulp and sugar:

1 tb.	4 tb. beaten white of egg ($\frac{1}{4}$ – $\frac{1}{3}$ white)
1 tb.	4 tb. crushed raw strawberries
$3\frac{1}{2}$ t.	4–5 tb. granulated sugar
$\frac{1}{4}$ t.	1 t. lemon juice

4. Occasionally hot apple or other fruit pulp is added to the white of egg (beaten) in making white-of-egg whip.

5. If the pulp of prunes (stewed) or any other dried fruit is used, it is well to make the pulp, sugar, salt, and lemon juice into a marmalade before blending them with the whites; make marmalade as follows:

- a. Mix the pulp, sugar, and salt with a small quantity of fruit juice or water.
- b. Stirring constantly, simmer mixture 3–5 min., or until it is as thick as a drop batter; use the jelly tests.
- c. Cool, and add the lemon juice.

The secret of success with any dried-fruit whip consists in much soaking of the fruit and thorough cooking of the marmalade. Skins, chopped, are usually retained in the marmalade, but, if preferred, remove the skins by means of a sieve. In the case of prunes remove the meats from the stones, chop them very fine, and add them to the pulp and sugar mixture before cooking. (A rolling pin, if made of very hard wood, may be used by each pupil for cracking stones.) Add the white of egg to this marmalade, beat mixture. 3–10 min. with a Dover beater, then serve raw, or bake or steam as in step 2 of method.

The pulp of dates (and sometimes that of figs) is occasionally used raw, making the preparation of marmalade unnecessary.

6. Fruit float is made as follows:

- a. Place soft custard or cream in a shallow glass dish.
- b. Drop raw whip by the spoonful into the liquid.

If preferred, the whip may be poached as follows before being added to the custard:

- a. Drop whip by spoonfuls into simmering water.
- b. Turn out gas, cover dish, and steam 3–5 min., or until whip is firm; then drain.

7. Strawberry or other raw fruit whip is often used as a sauce to pour over various desserts, such as the following:

Angel food or other white cake
Sponge cake
Lady fingers
Snow pudding

If a sauce is desired, either use the whip recipe as it is or thin it by the addition of fruit juice or extra sugar and fruit pulp.

FRUIT PULP FOR USE IN WHITE-OF-EGG WHIP AND IN CREAM WHIP

1. The pulp of almost any fresh fruits (raw or cooked) may be used singly or in any combination; for example:

Apples	Cranberries (cooked only)	Pineapple
Apricots	Currants	Raspberries
Bananas	Grapes	Strawberries (tame or wild)
Cherries	Peaches	Etc.

2. The pulp of almost any dried fruits (see Note 3) may be used singly or in any combination; for example:

Apricots	Pears
Dates	Prunes (alone, or combined with apricots)
Figs	Etc.

Notes:

1. Note two methods for preparing raw-apple pulp:

Grate the apple.

Scrape the apple with a silver knife.

Work quickly with raw apple, as well as with raw banana, else the fruit will discolor.

2. Note two methods for preparing raw-banana pulp:

Peel banana, discard fiber, and *mash* fruit in a bowl with a potato-masher or the back of a silver fork; or mash fruit by means of a potato-ricer or a fruit press.

Peel banana, reject fiber, and *scrape* fruit with a silver knife.

3. The following is the usual method for securing the pulp from dried fruit:

a. Wash fruit and soak it over night in cold water to cover.

b. Place it over the fire in this same water and let it simmer until it is tender and plump and until most of the water is evaporated.

c. Remove the fruit from the liquor and chop or grind it to a fine pulp.

$\frac{1}{4}$ lb. raw prunes results in about 1 c. stewed prunes.

Cooking of dried fruit is not always essential as a means of securing the pulp; soaking of the fruit may be sufficient. Sometimes dates require neither soaking nor cooking.

4. The chilled pulp of any raw or cooked fruit, mashed only or pressed through a sieve, may be used in the recipes on pages 195 and 200. Avoid juice. Seeds and skin often improve the appearance of whips.

Cooked fruit (prepared from either fresh or dried fruit) may include any of the following types:

Baked, steamed, or stewed fruit
Marmalades, preserves, and jellies
Canned fruit (fresh fruit only)

Beware of adding excess sugar to whips when sweetened sauces, jams, etc., are used.

5. Fruit juice, canned or fresh, may be substituted for either of the following:

A larger quantity of pulp

An equal quantity of pulp, if a little gelatin is used as a thickening agent

If, in either case, part of the mixture does not whip, the unwhipped portion may be placed in a tall-stemmed glass and the whip be piled on top, thus producing a pretty effect with grape or Damson-plum juice, etc.

White-of-Egg and Gelatin Whip, or Sponge

Ingredients:

½ t.	1 tb. granulated gelatin
1 t.	2 tb. cold water
2 tb.	¾ c. boiling hot liquid, selected singly or in any suitable combination from the following:
	Water or milk
	Cream (see Note 2)
	Fruit juice, raw or canned (such as grape, orange, raspberry, strawberry, or sweet cider)
	Jelly or jam (diluted with water until as thin as cream)
	Strong coffee, cocoa, or chocolate
	Sirup (such as caramel, maple, corn, chocolate, or strained honey)
	Etc.
0-2 tb.	Sugar to taste, 0-¾ c., the quantity depending upon the sweetness of the liquid used (see Note 1)
0-½ tb.	Lemon juice to taste, for example, 0-3 tb. (see Note 1)
1 h. tb.	2 whites of eggs, beaten stiff (see Note 9)
	Optional additions:
	Nuts, chopped (especially good in maple whip)
	Solid fruits, chopped
	Fruit pulp
	Fruit rinds, grated
	Coloring pastes
	Etc.

Method:

1. Soak gelatin in cold water 3-5 min.
2. Dissolve gelatin very thoroughly in boiling hot liquid. (Do not boil any lemon juice used in the recipe. Why?) Stirring is essential; and sometimes it is necessary to heat the mixture for a very short time so as to dissolve every particle of gelatin.
3. Add the sugar, and lemon juice if used. Strain, and chill 20-45 min., or until the mixture begins to thicken around the edges. (If by chance the mixture becomes more nearly set than this, warm it a little so as to soften it.)
4. Add the beaten whites of eggs. *Caution:* Do not beat the whites until just before it is time to add them to the gelatin. (Why?)
5. Set the bowl in a pan of ice water and beat mixture hard with a Dover beater 5-12 min., or until it is as stiff as a drop batter and almost ready to set.

If preferred, beat with a wooden spoon toward the last. It is the beating in of much air which gives the pudding a fine, even texture. Much air lightens and otherwise changes the color of any whip; for example, it makes snow pudding very white. (In work with the class recipe use either a bowl and a Dover beater or a plate and a wire beater.)

6. Add any of the optional additions (nuts, etc.) that are desired.

7. Heap mixture in small glass molds, and chill.

8. Turn whip out, or not, from the molds; the whip slips easily from the molds if the latter are dipped in hot water, or if a knife dipped in hot water is quickly passed around the inside of molds.

9. Serve with any of the following:

Cream and sugar
Soft custard
Whipped cream
Syllabub (see page 202)
Grape or other fruit juice

Notes:

1. If judgment is used as to the type of liquid chosen and the quantities of sugar, etc., used, this general recipe results in many delicious desserts; for example, the following suggestions as to types of liquid and proportions of sugar and lemon juice (to use in the general recipe) have been found to yield successful lemon, orange, grape, and sirup whips:

WHIP	BOILING HOT LIQUID	SUGAR		LEMON JUICE	
		Class recipe	Home recipe	Class recipe	Home recipe
a. Lemon whip (snow pudding)	Water	1½ t.	¾ c.	1 t.	2⅔ tb.
b. Orange whip	Strained orange juice	¾ t.	⅓ c.	⅓ t.	1 t.
c. Grape whip	Slightly sweetened grape juice	¾ t.	⅓ c.	¾ t.	2 tb.
d. Sirup whip	Any one of the following sirups diluted with water until as thin as thin cream: Caramel Corn Honey Maple	0	0	0	0

If the foregoing quantities of sugar and lemon juice are used, the class recipe in each case fills, or almost fills, one sherbet glass; the large recipe in each case fills 4-6 sherbet glasses. Concord grapes yield a violet whip; Catawbas yield a dark pink whip.

2. If hot cream (¾ c.) is used as the liquid in this general recipe, a dish somewhat similar to charlotte russe results. Flavor the cream with vanilla or other extract.

3. Whips made from maple or other sirups are especially popular because so very velvety in texture; they resemble parfaits in this respect.

4. This recipe is an excellent one for the use of left-over fruit juice, jelly, etc. A varied and interesting lesson results if each pupil is asked to bring 2 tb. fruit juice or other liquid from home; see use in class recipe.

5. This lesson and other gelatin lessons are less expensive if given in cold weather, since, as a rule, no ice is required then.

6. White-of-egg and gelatin whip is pretty served as follows:

a. Place two or three layers of varying colors (such as white, chocolate, and strawberry) in a shallow stemmed glass; heap them high in the glass.

b. Garnish with a little jelly, angelica, or other ornamentation.

Molds of this kind, prepared in the morning, will keep their shape until dinner at night.

7. Any of the whips may be used as a sauce or garnish for other desserts, such as sponge or angel cakes. If a whip is to be used as a sauce, it is often desirable to have the whip thinner than usual; in this case beat the mixture less, chill it less, or use less gelatin.

8. Jello (or any of the other flavored gelatins) may be beaten stiff by itself, then be combined with white of egg, cream, etc.

9. In preparing white-of-egg and gelatin whip, the same quality of pudding results if, in step 4, *unbeaten* whites of eggs are added to the gelatin mixture. However, it is doubtful whether any time is saved by the use of this method.

10. The following is a typical whip made without whites of eggs; beat with a Dover beater until whip is frothy and thick:

4 t. gelatin

$\frac{1}{4}$ c. cold water

$\frac{1}{2}$ c. boiling water

$\frac{1}{4}$ c. strawberry jam or preserves (or raspberry or other fruit jam or preserves)

Cream Whip

(3 or 4 servings)

Ingredients:

2 tb.

0- $\frac{1}{8}$ t.

to taste

1-2 t.

1 c. cream, measured after being whipped very stiff

Sugar to taste, powdered or granulated

Extract, if desired (vanilla or almond is good with rice)

2 tb.-1 c. of one or any suitable mixture of the following (used as far as possible without liquefying the cream):

Fruit chopped, shredded, or cut in small cubes (use fresh or dried fruit, either raw or cooked; canned fruits, such as peaches or pineapple, are good)

Pulp of any raw or cooked fruit (see outline, page 197)

Fruit juice (grape, berry, etc.)

Jelly or marmalade

Coffee, strong

Fresh marshmallows (cut in small cubes)

Coconut (shredded)

Nuts (chopped)

Fudge (soft and creamy)

Chocolate, melted, or dry cocoa

Candied materials, chopped (angelica, cherries, ginger, etc.)

Crumbs rolled from gingersnaps, dried cake, or macaroons (see Note 2)

Rice, left-over cooked (see Note 3)

Etc.

Method:

1. Mix thoroughly all the ingredients except the cream.

2. Fold in the whipped cream. Beware of beating if any coarse solid foods have been used. (Why?) If liquids (such as fruit juice) or fine solid foods (such as crumbs) are present, it is often desirable to beat for a few seconds, or just until mixture is well blended, with a spoon or a Dover beater.

3. Place whip in glass dishes and serve at once. Lady fingers, sponge cake, or crackers are good accompaniments. Garnish if desired, using whole or chopped nuts or cherries, etc.; a slice of fresh or preserved fruit (such as peach or pineapple) may be served on each portion of rice or other whip.

Notes:

1. All the ingredients should be ice cold before being mixed.
2. Macaroon crumbs are prepared as follows:
 - a. Dry macaroons (made from genuine almond paste) in a slow oven.
 - b. Remove them from oven, let them stand until hard, then roll them with a rolling-pin.
 - c. Sift crumbs if desired.
3. In making rice whip, either of the following may be substituted for sugar:
 - Grape or other fruit juice
 - Stewed dates or figs, mashed to a pulp
4. If desired, whip in any or all of the following with the other ingredients:
 - Beaten white of egg
 - Coloring paste
 - Dissolved gelatin (see the following note)
5. Bavarian creams, made as follows, are closely related to the given recipe for cream whip:
 - a. Beat simple gelatin jelly to a froth. (Sometimes the beating is omitted.)
 - b. Just before the froth sets, fold in cream whipped very stiff, allowing 2-8 tb. unwhipped cream to 1 c. jelly.

Eggs are sometimes added to Bavarian creams, thus making Bavaroises; or a mixture of milk and egg is substituted for the cream called for in Bavarian creams.

Bavarian creams are grouped as follows, according to flavor or typical ingredient:

Fruit Bavarian creams (lemon, orange, peach, strawberry, etc.)

Miscellaneous Bavarian creams:

Chocolate

Rice

Coffee

Vanilla (often used in charlotte russe)

Maple

Etc.

Bavarian creams are often used as the filling for charlottes (see *Diet for Children*).

6. The two following recipes are also somewhat related to "cream whip."

Bohemian Cream

Method:

1. Mix together 1 c. thick cream (whipped or not) and 1 c. grape jelly which is not very stiff.

2. Place in glass cups, and chill.

Syllabus

Ingredients:

- 1 c. fresh cream
- $\frac{1}{3}$ – $\frac{1}{2}$ c. powdered sugar
- $\frac{1}{4}$ c. grape juice
- 1 white of egg, beaten stiff

Method:

1. Whip half the sugar with the cream, half with the white of egg, then combine the two mixtures and blend well.
2. Add grape juice, chill, and serve over chilled and sweetened fruit, such as bananas, oranges, pineapple, or strawberries.

TYPES OF SOUFFLÉS: A SYNOPSIS

- I. *Savory soufflés* (used as the main course of a luncheon or as an entrée at dinner):
 - a. Sauce-soufflé (white or other sauce as the basis; see page 136)
 - b. Custard-soufflé (firm custard as the basis; see *Diet for Invalids*)
 - c. Omelet-soufflé (foamy omelet as the basis; see Note 7, page 143)
- II. *Sweet soufflés* (used as desserts):
 - a. Whip (see pages 194–202; note that the average whip contains no milk)
 - b. Custard-soufflé
 - c. Omelet-soufflé (see Note 7, page 143)

Notes:

1. Soufflés are the lightest, or spongiest, form of made dishes; the term soufflé is derived from a word meaning “to puff.” Properly speaking, soufflés are baked or steamed and are served hot, but the term is here made to include the whips which are served raw.

2. Both savory and sweet soufflés are economical in that they offer an attractive use of left-overs.

3. May any of the soufflés be classed as “complete” dishes?

4. Beaten eggs, as a means of holding air, are used in soufflés in either of the following ways (it is essential that only fresh eggs be used):

- a. Whole egg (a custard effect results):

White and yolk beaten together

White and yolk beaten separately

- b. White only, beaten stiff

Is the yolk of egg (beaten) ever used by itself as a means of holding air in soufflés?

Eggs are also used in soufflés as a means of holding steam and carbon dioxide (see Note 6).

5. It is always best to work in a cool place while beating eggs or otherwise preparing for any soufflé. Why?

6. When eggs are expensive, a little baking powder may be substituted for part of the eggs used in soufflés; 1 t. baking powder takes the place of one white of egg. Such a substitution is often made in savory soufflés.

7. Pupil to show that all soufflés are really elaborations of plain foamy omelet (see page 141).

VISCOUS SUBSTANCES OF USE IN GENERAL COOKING: A SYNOPSIS

(A study primarily of leavens)

I. Certain substances, by reason of their properties of viscosity and elasticity, one or both, are easily made light or fluffy by one or more of the following leavening agents:

Air (a mixture of gases)

Steam (a gas or vapor)

Carbon dioxide (a gas produced by baking powder, yeast, etc.)

Greater lightness results, as a rule, when the leavening agents are heated (see Note 1); note expansion of soufflés and other baked dishes. Viscosity, or stickiness, in a substance allows it to take up and retain air or a gas with ease. Elasticity in a substance allows of the free expansion of air or a gas; note the extreme elasticity of gluten.

Note study of leavening agents in the tables of Notes 2 and 3.

II. The chief viscous substances,¹ used singly or in any combination in cooking, are as follows (see Notes 3 and 4):

Gluten

Albumin (found in white of egg,² etc.)

Gelatin

Rich cream

Sugar solutions (jellies, maple sirup, molasses, honey, etc.)

Cooked starch paste (such as white sauce, or the stiff paste sometimes used in breads, etc., made with substitutes for wheat flours; see *Food Economy*, page 166)

III. Note possible aids to viscosity:

Low temperature, in case of albumin, cream, etc.

A little salt, added to white of egg

Etc.

As a rule, anything (such as cold) which tends to make a liquid thick tends to make the liquid more viscous, as in the case of molasses. Heat often "seals the trap" for air or a gas; note the setting, or stiffening, of albumin, cooked starch paste, and gluten by heat.

IV. The chief effects of forcing a gas or air (a mixture of gases) into foods are as follows:

Increase in bulk (the food is made lighter or less dense; compare the bulk of white of egg unbeaten and beaten)

Change of color (the food is whitened)

Change of flavor

¹ For a list of viscous substances of possible use as the basis of mayonnaise (an emulsion), see *Diet for Invalids*, "Ingredients for Mayonnaise: A Synopsis," Note 1.

² Saponin, a foam-producing substance, is a forbidden substitute for white of egg in meringues, frostings, etc. See *Journal of Home Economics*, December, 1916, page 632.

Notes:

1. Heat causes the following changes to take place during the cooking of foods (all gases expand when heated):

- a. It expands air. Air does not require a great quantity of heat for expansion. Such foods as omelets, which depend upon the expansion of the air beaten into eggs as the chief leavening agent, should be cooked at a moderate or low temperature. Intense heat stiffens the albumin too soon, there is no expansion of air, and the food is rendered tough and flat. "Any mixture lightened by eggs, as sponge cake or soufflé, requires a lower temperature than does one lightened by baking powder, as biscuits, or by steam, as popovers."¹
- b. It evaporates water and expands it into steam. If the steam can be inclosed within the food, it will produce a very light product. Very *high* and *sudden* heat must be used when steam is the leavening agent, and the heat must be continued long enough to dry the product well. The sudden change of water into steam results in the hollowness of popovers and cream puffs. Are any other food products hollow? Steam occupies about 1700 times more space than the water from which it was produced.
- c. It expands carbon dioxide. Such products as baking-powder biscuits, which depend upon the expansion of carbon dioxide (produced by the action of tartaric acid, acid phosphate, or alum upon bicarbonate of soda), should be cooked at high temperatures to make them light.

2. Pupil to signify by checks which of the three leavening agents named in the headings of the table below are utilized in yeast breads, etc., and by crosses which are probably the chief leavening agents used. (Crackers, fritters, omelets, pastry, etc., may also be listed in the left-hand column.)

As a rule, air, steam, and carbon dioxide are used in conjunction with one another. For example, air usually plays a minor part in popovers and other members of the so-called "steam group"; air and steam usually play a minor part in yeast breads and other members of the so-called "carbon-dioxide group."

FOODS	LEAVENING AGENTS		
	Expansion of Air (See Note 1, a)	Change of Water into Steam (See Note 1, b)	Expansion of Carbon Dioxide (See Note 1, c)
Breads, yeast.....			
Cakes containing no fat (sponge and angel cakes).....			
Cakes containing fat (cup cake, pound cake, etc.).....			
Cereals (pop corn and puffed rice and wheat).....			
Cream puffs.....			
Meringues.....			
Popovers.....			
Soufflés (savory and sweet).....			
Yorkshire pudding.....			

¹ *University of Illinois Bulletin*, Vol. XIV, No. 47, "Fats and Oils in Cookery. Cooking Temperatures," by Williams and Gray.

3. Pupil to signify (by crosses in the right-hand columns) which of the leavening agents and viscous substances—the names of which are given in the headings of the table below—are used in the various soufflés:

SOUFFLÉS	LEAVENING AGENTS			VISCIOUS SUBSTANCES				
	Air	Steam	Carbon Dioxide	Albumin	Gelatin	Rich Cream	Sugar Solution	Cooked Starch Paste
SAVORY SOUFFLÉS								
Sauce.....								
Custard.....								
Omelet.....								
SWEET SOUFFLÉS								
Whip:								
Whole-egg.....								
White-of-egg.....								
White-of-egg and gelatin.....								
Cream.....								
Custard.....								
Omelet.....								

4. Which of the viscous substances listed in II, page 203, are most used in cooking? Is the retention of air by dry, sifted flour due to viscosity in the flour? Study *Food Economy*, pages 166–167, for the relation of viscous substances to flour mixtures.

5. Pupil to add viscogen and other commercial agents used in whipping cream to the list of possible aids to viscosity (see III, page 203).

6. Pupil to discuss the effects of forcing air by beating, etc. (see IV, page 203), into each of the following:

Batters and doughs

Candy, divinity

Candy, pulled

Cocoa

Cornstarch pudding (a cooked starch paste)

Cream

Egg white or yolk

Frosting, boiled

Gelatin (see marshmallows, etc.)

Ice cream

Jelly

Meltose (a brand of sirup)

Milk shake

Olive oil

Water

(Discuss the manufacture of floating soap.)

Pupil to discuss the effects of carbon dioxide (see IV, page 203) in each of the following:

Batters and doughs

Molasses candy

Tomato soup

Water (define "charged" water)

} (Note use of soda)

WATER ICES

Ingredients for water ices are, as follows:

Water
Sugar
Fruit juice

The proportions may be varied as desired. The following are the proportions for typical water ices, each being made on the basis of 4 c. water and yielding 8-10 servings. A typical class recipe is given in the last space.

	LEMON	ORANGE	PINEAPPLE	STRAWBERRY	RASPBERRY
Water.....	4 c.	4 c.	4c.	4 c.	4 c.
Sugar.....	1½-2 c.	1½-2 c.	1½-2 c.	1½ c.	1½ c.
Lemon juice.....	¾-1 c.	½ c.	½ c.	1 tb.	2 tb.
Other fruit juice .....	.....	2 c. orange juice	2 c. pineapple juice	2 c. straw- berry juice	2 c. raspberry juice

	CURRENT	RASPBERRY AND CURRENT	GINGER	CRANBERRY	LEMON (Class recipe)
Water.....	4 c.	4. c.	4 c.	4 c.	¼ c.
Sugar.....	1½ c.	1½ c.	1 c.	2 c.	2 tb.
Lemon juice.....	.....	.....	½ c.	1 tb.	2 t.
Other fruit juice.....	2 c. currant juice	¾ c. rasp- berry juice 1½ c. currant juice	½ c. orange juice	2 c. cranberry juice (from cooked berries)	
Miscellaneous ingredients.....			¼ lb. Canton ginger, cut in small pieces		

Method:

1. Boil sugar and water together to make a clear sirup; boil 20 min., in the case of all recipes built on the basis of 4 c. water and 1-2 c. sugar (1½-2 c. sugar are usually used to 4 c. water).

2. Skim, cool, add fruit juice, strain, and freeze solid. Use 3 c. ice to 1 c. salt.

Notes:

1. This is the method for all water ices.
2. Avoid heating fruit juices, else the flavor will be injured.
3. In dealing with raspberries, strawberries, or currants, mash the fruit, squeeze it through a double cheesecloth, then add it to the cooled sirup.

4. In making ginger ice, boil the ginger 15 min. with the sugar and water to make a flavored sirup.

5. Possible additions to and garnishes for ices include:

- Grated rind of orange or lemon
- Blood-orange or pomegranate juice (a pretty ice results)
- Orange carpels, or sections
- Chopped pineapple
- Chopped nuts
- Angelica cut in strips
- Candied cherries
- Coloring pastes

Expense may be reduced by the substitution of citric acid for part of the lemon juice. Do not use the citric acid without any lemon juice.

6. In addition to its use as a dessert, an ice is often served as a relish with the meat course of a course dinner.

7. The following are useful in pounding ice for freezing purposes:

- Pick
- Shaver
- Ice-bag (such as a potato sack)
- Hammer (such as a wooden mallet or a flat iron)

A machine for grinding ice is a great convenience.

8. Note the following class suggestions for freezing ices, sherbets, ice cream, etc.:

a. Pupil to bring fruit juice from home; semi-sweet jelly or jam diluted with water is a possible substitute for juice. Ices are excellent for the use of left-overs. *Caution:* If the mixtures for ices, sherbets, etc., are too sweet, they will not freeze. Why?

b. Teacher or a pupil to break ice into very small pieces by means of a pick and hammer. If care is used, this can be done in the sink or in the ice-chamber of the refrigerator.

c. Each pupil to pound her own ice as follows:

- (1) Place the ice in a small-sized flour or a salt bag brought from home.
- (2) Place the bag on a meat board and pound it until the ice is as fine as ice-cream salt. If a rolling pin is of hard wood, it may be used for pounding; pound with the entire length of the pin.

d. Each pupil to freeze her own mixture as follows: Pour the mixture to be frozen into a sample baking-powder can having no leaks, set can in a quart basin, and pack with ice and salt. (It is often well to substitute the top of a double boiler for the can, especially in making ice cream.) Occasionally, so as to avoid lumps, beat the freezing mixture from the sides of can with a spatula. If preferred, six to eight small cans may be frozen in one dishpan of ice and salt. A tin cup, covered with the lid of a jelly glass and set in a basin, is also good as a freezer.

9. In preparing large quantities of sirup for use in ices, it is well to use a sirup scale, or gauge.

10. The term "ices," in the broader sense, includes frappés, etc. Pupil to supply data for the following table. Study *Boston Cooking-School Cook Book*, by Farmer; *Bulletin 123*, Iowa State College of Agriculture, Ames, Iowa; etc.

Chief Types of Ices

ICES	DESCRIPTION
Ice proper	
Sherbet, or sorbet:	
1. Plain fruit	
2. Milk	
3. Granite	
Punch	
Soufflé	
Frappé	

BEVERAGES

The following is a list of cold beverages; these beverages are usually iced, except in the case of oatmeal or bran water, and are relished particularly in hot weather:

1. Tea, coffee, cocoa, and chocolate. Note that the same tea may not be equally palatable served hot or cold.

2. Oatmeal or bran water, sometimes served to workers in the factory or in the fields; on the hottest days it can often be drunk with safety, when ice water would be dangerous.

3. Fruit beverages:

a. Cooked-fruit beverages (prepared from solid fruit):

Baked-apple or pear water is prepared as follows:

(1) Cut 3 baked apples or pears in slices, add $1\frac{1}{2}$ c. boiling water, and let stand 1 hr.

(2) Strain, and chill. Serve with sugar, if desired.

Preserved-fruit water is prepared as follows:

(1) Add 1 c. boiling water to 2-3 tb. preserved fruit, chopped, selected singly or in any combination from the following:

Cherries	Pineapple
Currants, black	Plums
Peaches	Etc.

(2) Let stand 1 hr., strain, and chill. Sugar and spice are possible additions. (Serve hot, if preferred.)

b. Fruitades (beverages prepared from fresh or canned fruit juice):

These are the same as water ices, except that they contain less sugar and are not frozen. (See water ices, page 206.) Jelly is sometimes substituted for the fruit juice. Juices for fruitades include the following:

Currant	Lime
Grape	Orange
Lemon	Plum

c. Punches (derived from fruitades): Serve in sherbet glasses, from a punch bowl.

d. Fruit-vinegar beverages (general recipe is given at the top of the following page).

Etc.

Fruit-Vinegar Beverage**Method:**

Mix 2-3 tb. of any of the following fruit vinegars (sirups) with 1 c. ice water containing chipped ice:

Blackberry
Currant
Plum
Raspberry
Strawberry
Etc.

Notes:

1. Raspberry vinegar is prepared as follows:
 - a. Press ripe red raspberries through a fine sieve lined with cheesecloth.
 - b. Let juice stand (to sour) 4-6 days in a stone crock.
 - c. Remove the white sheet of foam formed on the surface. (Of what is this scum composed?)
 - d. Mix the clear juice with almost half as much sugar as juice.
 - e. Boil until a creamy sirup results, then seal air-tight in bottles.
2. Sometimes, especially in class work, it will be found convenient to work as follows:
 - a. Prepare jelly from the first extraction of any sour jelly fruit.
 - b. Prepare fruit vinegar from the second extraction of juice.

Lemonade**Ingredients:**

Juice of 1 large lemon (3-4 tb. juice)
1-1½ c. cold or boiling water
Sugar or sirup to taste (2-3 tb., for instance)
Garnish, selected from the following:
Thin slice of orange or lemon
Cherries
Berries
Mint leaves

Method:

1. Strain the juice, then add water and sugar or sirup and stir to dissolve all the sugar. (Which is preferable, cold or boiling water?)
2. Place in tall glasses or sherbet cups, garnish, and chill; chipped ice is a good addition.

Notes:

1. Other fruitades are made in a similar way; vary the sugar and the water according to the acidity of the fruit juice.
2. The more acid the fruit, the more the beverage is relished in hot weather.
3. Note that sour lemonade and other fruitades, as well as fruit vinegars, are often useful in the treatment of overweight.
4. Boiling hot lemonade, taken at bedtime, is of especial use in the treatment of colds.

5. Derivatives of the given recipe for plain lemonade include the following:

a. Lemonade and grape juice, mixed half and half

b. Tea lemonade:

(1) Add boiling hot lemonade to tea leaves and let stand 3-5 min. in a warm place.

(2) Strain into glasses, garnish, and chill.

c. Irish-moss lemonade

d. A cheaper form of lemonade:

(1) Prepare a 50 per cent water solution of citric-acid crystals, bottle, and keep on hand.

(2) Make a lemonade by adding ice water and sugar to part lemon juice and part citric-acid solution.

Avoid this kind of lemonade with children and invalids.

Etc.

6. Sirup is often more convenient than sugar for sweetening these beverages, especially if they are made with cold water. Why? Sirup for fruit beverages is made as follows:

a. Add 1 c. water to 1 c. sugar, and stir mixture over fire to dissolve the sugar.

b. Simmer, without stirring, 10-15 min.

c. Cool a little, and seal in bottles.

7. The rind of the orange adds flavor to orangeade; use, for instance:

Juice and rind of one sour orange

1-1½ tb. sugar

1 c. boiling water

Pour water over rind and let stand 3-4 min. Add other ingredients, strain, and chill.

Tea

Ingredients:

(1 cup)

½-1 t. tea (according to the grade of tea, etc.)

1 c. fresh and freshly boiling water

Method:

1. Scald the teapot.

2. Add tea, pour in boiling water, cover, and let stand (steep) 3-5 min. in a warm place, on the back of stove for instance. The tea may be steeped in the dining room if the pot is covered with a tea cozy.

3. Strain into hot cups, and serve at once in any of the following ways:

a. Clear

b. With cream or milk

c. With a thin slice of lemon. Such tea is usually served at afternoon parties. Note possible additions or accompaniments:

Slice of raw apple or orange

Cherry

Clove (often inserted in a slice of lemon, orange, or apple)

Candied flowers (violets, rose petals, etc.)

Preserved (almost candied) fruit, etc., such as strawberries, pineapple, and ginger

In serving tea, have at hand a pitcher of very hot water for purposes of dilution. Note that tea served clear should be much weaker than that served with cream.

Serve sugar with tea or not, as preferred. Lump sugar generally is used; rock-candy crystals or a rich sugar sirup is sometimes used at afternoon teas.

If cream and sugar are used, it is well to put them in the cup first, then add the tea. (A similar rule applies to coffee.)

Notes:

1. Another desirable method is to boil the water in a scalded teapot, then add the tea.
2. Russian tea is made as follows:
 - a. Prepare extra strong tea in a samovar; a cheesecloth bag may be used for holding the tea leaves.
 - b. Pour a very little of this strong tea into a glass (or a cup), then fill the glass with boiling water.
 - c. Serve with lemon or not, as desired.

Russian tea is excellent when a large number of persons is to be served.

Another good method for use at receptions, etc., is as follows:

- a. Prepare extra strong tea in a teapot, strain it into a second teapot, and place under a cozy.
 - b. As needed, pour a little of this essence into a cup, and dilute it with boiling water.
3. Avoid a tin teapot; use granite, crockery, or silver. (Let the pupil soak a piece of tin overnight in a solution of tannin. Describe effect.)
4. Note reasons why tea should not be boiled:

Boiling extracts too much tannin.

Boiling possibly volatilizes the essential oils.
5. Tea is often very refreshing to older persons.
6. Iced tea is relished in hot weather by many persons.

APPENDIX

APPENDIX

PART A. CALORIC VALUE OF FOODS

FUEL VALUES OF TYPICAL FOODS CONSIDERED IN THIS BOOK

Let the pupil prepare a lengthy table, copying on each page the headings given below, and listing four to ten foods, so far as possible, under each letter of the alphabet:

FOOD	CALORIES PER LB. OF EDIBLE MATERIAL	FOOD	CALORIES PER LB. OF EDIBLE MATERIAL
A		C	
B		D	

Notes:

1. The following are among the references which may be used: *Bulletin 28*, "The Chemical Composition of American Food Materials," Office of Experiment Stations, United States Department of Agriculture; Sherman, *Chemistry of Food and Nutrition*, pages 319-331; Locke, *Food Values*; Forster and Weigley, *Foods and Sanitation*, pages 369-378.

2. Which ten of the foods listed have the highest fuel values? Which ten of the foods listed have the lowest fuel values?

3. Prepare various menus for hot days and for cold days.

4. Using the references given above, let the pupil list six or more foods under each of the following headings:

- Rich in protein
- Rich in fat
- Rich in carbohydrate
- Rich in both protein and fat
- Rich in both protein and carbohydrate
- Rich in water and cellulose

SUMMARY OF FUEL VALUES: TABLE I

500 OR FEWER CALORIES PER LB.	500-1,000 CAL- ORIES PER LB.	1,000-1,500 CAL- ORIES PER LB.	1,500-2,000 CAL- ORIES PER LB.	2,000-2,500 CAL- ORIES PER LB.	2,500-4,220 CAL- ORIES PER LB.

Notes:

1. Pupil to list the following foods (groups chiefly) according to the approximate fuel values used as headings in the above columns:

Breads	Fried vegetables (Saratoga chips, etc.)
Cakes, fat-containing	Fruits, fresh
Cakes, sponge	Fruits, dried
Candies	Legumes, dried
Cereals, breakfast	Meats, fat (bacon, etc.)
Cheeses	Meats, lean (steak, etc.)
Chocolate and cocoa (beverages)	Milk, condensed
Chocolate (not a beverage)	Milk, fresh
Coffee and tea	Milk, malted
Cookies	Nuts
Cornstarch, tapioca, and sago	Olives, green and ripe
Crackers	Pastries (pies, etc.)
Cream	Pickles, sour
Eggs	Soups, cream
Fats (butter, oils, etc.)	Soups, stock
Fish	Sugars
Flours	Vegetables, green
Flour pastes (macaroni, etc.)	Vegetables, root and tuber
Fried flour mixtures (doughnuts, fritters, etc.)	Etc.

2. In all six columns consider calories per pound of edible material.

3. References: The same as for the table on page 215.

PART B. CALORIC VALUE OF SPECIFIC MENUS

The following is a specimen outline whereby the pupil is given the method for proving by caloric values whether any given menu is hearty or light.

I. Example of high-calorie diet:

Menus for One Day for Six Persons

(Suitable for camping or under other conditions demanding a large output of energy)

Breakfast (See page 20)

Farina with chopped figs

Sautéed ham Boiled potatoes
Toast Coffee

MATERIALS	VOLUME	WEIGHT		PROTEIN CALORIES	TOTAL CALORIES
		LB.	OZ.		
Farina (cooked mush).....	3 c.	1	8	48	396
Figs.....	12 figs	.....	12	66	1,180
Ham, medium-fat.....	6 slices	.....	10	220	1,007
Potatoes.....	6 potatoes	2	.....	68	620
Toast.....	12 slices	.....	12	103	911
Butter.....	6 tb.	.....	3	3	675
Sugar.....	1 c.	.....	8	.....	930
Milk, for cereal and coffee.....	3 c.	1	8	88	392
				596	6,111

Luncheon (See page 13)

Sautéed corn-meal mush

Boiled fish Baking-powder biscuits
Prune jelly Cookies Tea

MATERIALS	VOLUME	WEIGHT		PROTEIN CALORIES	TOTAL CALORIES
		LB.	OZ.		
Fish (average).....	.....	3	.....	688	1,250
Corn-meal mush, sautéed.....	3 c.	1	8	40	1,000
Biscuits.....	12 avg.	.....	8	28	675
Jellied prunes.....	3 c.	1	8	44	1,678
Cookies, soft molasses.....	12 avg.	.....	6	40	650
Butter.....	6 tb.	.....	3	3	675
Sugar.....	$\frac{3}{8}$ c.	.....	3	.....	348
Cream, for jelly and tea.....	$1\frac{1}{2}$ c.	.....	12	24	660
				867	6,936

Dinner (See page 105)

Boiled beans

Boiled potatoes

Stewed tomatoes

Corn bread

Butter

Fruit cobbler

MATERIALS	VOLUME	WEIGHT		PROTEIN CALORIES	TOTAL CALORIES
		LB.	OZ.		
Boiled beans, with bacon ends	1½ pt.	1	8	250	1,000
Potatoes	6 medium	2	.....	68	620
Stewed tomatoes, with butter	3 c.	1	8	36	827
Corn bread . . . . .	.....	1	8	192	2,400
Butter	6 tb.	.....	3	3	675
Fruit cobbler, with plum jam . . . . .	.....	1	8	169	2,355
				718	7,877

Note:

In the foregoing dietary study for six persons for one day the total fuel value of the food equals 20,924 calories, or nearly 3,500 calories per person per day. (See average daily requirement for hearty diet, page 5.)

The number of protein calories in the total is 2,181, or a little more than 10 per cent of the whole fuel value.

In this dietary study the meals have been planned so as to yield approximately an equal number of calories, with a slight progressive increase from breakfast to the last meal of the day. It has been found from experiment with persons working out of doors that the quantities consumed at the three meals are more nearly equal than in the case of other workers.

*II. Example of light, or low-calorie, diet:***Menus for Six Persons***Luncheon* (See page 125)

Orange soup

Cheese wafers

Potato and green-pea salad

Cooked dressing

Cream-cheese and olive sandwiches

Angel cake

MATERIALS	VOLUME	WEIGHT		PROTEIN CALORIES	TOTAL CALORIES
		LB.	OZ.		
Orange soup	3 pt.	3	.....	.....	1,060
Wafers spread with cottage cheese	12 wafers	.....	6	192	551
Potato and green-pea salad	1½ pt.	1	8	59	423
Dressing, cooked	1¼ c.	.....	10	22	325
Filling for sandwiches	1 c.	.....	8	142	786
Bread for sandwiches . . . . .	.....	.....	10	105	760
Angel cake . . . . .	.....	.....	6	66	540
				586	4,445

Dinner (See page 134)

Broiled fish	Hollandaise sauce	Potato curls
Young beets in butter	Bread	Peanut butter
Stewed rhubarb	Custard sauce	Sponge cake

MATERIALS	VOLUME	WEIGHT		PROTEIN CALORIES	TOTAL CALORIES
		LB.	OZ.		
Fish (lake trout).....		2	8	536	1,859
Hollandaise sauce.....	1 c.		8	34	979
Potato curls.....			12	36	615
Beets in butter.....	1 qt.	1		34	620
Bread.....	6 slices		6	70	456
Peanut butter.....	2 tb.		1+	45	184
Stewed rhubarb.....	1 qt.	1		5	910
Custard sauce.....	1½ c.		12	74	569
Sponge cake.....			6	72	636
				906	6,828

Note:

Assuming that these two meals have been planned to yield three-fourths of the day's ration, the number of calories per person per day will equal a little over 2,500. (See average daily requirement for light diet, page 5.)

Sufficient high-protein foods have been introduced to bring the percentage of the protein calories to very nearly 15 per cent, because, since the protein requirement is more constant than the calorific, the range of the protein calories may well be in inverse ratio to those of the total calories, especially in a very low-calorie diet.

PART C. ONE-HUNDRED CALORIE PORTIONS

Fuel values of foods are very conveniently measured in terms of 100-calorie portions. The following statements (simple, and hence of use to the housekeeper) are quoted from Mary Swartz Rose, *Feeding the Family*, page 13:

APPROXIMATE QUANTITIES OF FOOD TO YIELD 100 CALORIES

Cooked or flaked breakfast foods.....	$\frac{3}{4}$ -1 $\frac{1}{4}$ cups
Milk.....	$\frac{5}{8}$ cup, whole; 1 $\frac{1}{8}$ cups, skim
Cream.....	$\frac{1}{4}$ cup, thin; 1 $\frac{1}{8}$ tablespoons, very thick
Butter, olive oil, or any other kind of fat.....	1 tablespoon
Bread.....	1 slice 3 in. X 3 $\frac{1}{2}$ in. X 1 in.
Uneda biscuit.....	4 crackers
Fresh fruit.....	1 large orange or apple; 1 medium banana or bunch of grapes; 2 medium peaches or pears
Dried fruit.....	4 or 5 prunes or dates; 2 dozen raisins; 1 $\frac{1}{2}$ large figs
Eggs.....	1 exceptionally large; 1 $\frac{1}{8}$ medium
Meat (beef, lamb, mutton, veal, chicken).....	About 2 ounces of cooked lean meat
Bacon (cooked crisp).....	About $\frac{1}{2}$ ounce (4 small thin slices)
Potatoes.....	1 medium
Sugar.....	1 tablespoon granulated; 3 $\frac{1}{2}$ "full size" lumps
Cocoa (made with milk).....	$\frac{3}{8}$ cup
Cream of bean soup.....	$\frac{1}{2}$ cup
Macaroni and cheese.....	$\frac{1}{2}$ cup
Rice pudding.....	$\frac{1}{2}$ cup
Ice cream (made with thin cream).....	$\frac{1}{4}$ cup
Milk sherbet.....	$\frac{1}{4}$ cup
Sponge cake.....	1 large individual cake
Nuts (shelled almonds, peanuts, pecans).....	About $\frac{1}{2}$ ounce
Sweet chocolate.....	About $\frac{3}{4}$ ounce

The following statements are quoted from Anna E. Richardson and Jessie P. Rich, *University of Texas Bulletin*, No. 1804:

APPROXIMATE QUANTITIES OF FOODS TO YIELD 100 CALORIES

NAME OF FOOD AND SERVING	OUNCES
Bread (corn), small square.....	1.30
Cabbage, 3 cups.....	11.00
Celery.....	19.00
Cheese (full cream), 1 $\frac{1}{2}$ cubic inches.....	.82
Cottage cheese, 4 cubic inches.....	3.12
Custard (milk), ordinary cup.....	4.29
Grape juice, small glass.....	4.20
Lettuce.....	17.30
Olives (green), 7 olives.....	1.10
Puffed rice, 1 $\frac{3}{4}$ cups.....	.97
Shredded wheat, 1 biscuit.....	.94

Notes:

1. See the following references for further details (lists, costs, photographs, etc.) concerning 100-calorie portions:

Irving Fisher, "A Graphic Method in Practical Dietetics," *Journal of the American Medical Association*, April 20, 1907, Vol. XLVIII, pages 1316-1324.

Henry C. Sherman, *Chemistry of Food and Nutrition* (1917 ed.), pages 128-129, 319-331.

Mary Swartz Rose, *Feeding the Family*, Tables I and III of the Appendix.

Kinne and Cooley, *Foods and Household Management*, page 317.

Fisher and Fisk, *How to Live*, pages 175-183.

The books by Rose and Kinne and Cooley contain photographs of 100-calorie portions.

2. *Pupil Problem I*: Prepare an exhibit of 100-calorie portions, making careful measurements either by weight or by volume. Group the 100-calorie portions; for example:

Beverages	Fruits, fresh and dried	Soups
Desserts	Meats	Starches and cereals
Fats	Salads	Vegetables, fresh and dried

Such an exhibit makes possible a vivid and simple comparison of food values.

Photograph the exhibit, if desired.

3. *Pupil Problem II*: Using the 100-calorie portion scheme, make a quick estimate of the total number of calories consumed by each pupil on the preceding or any other day.

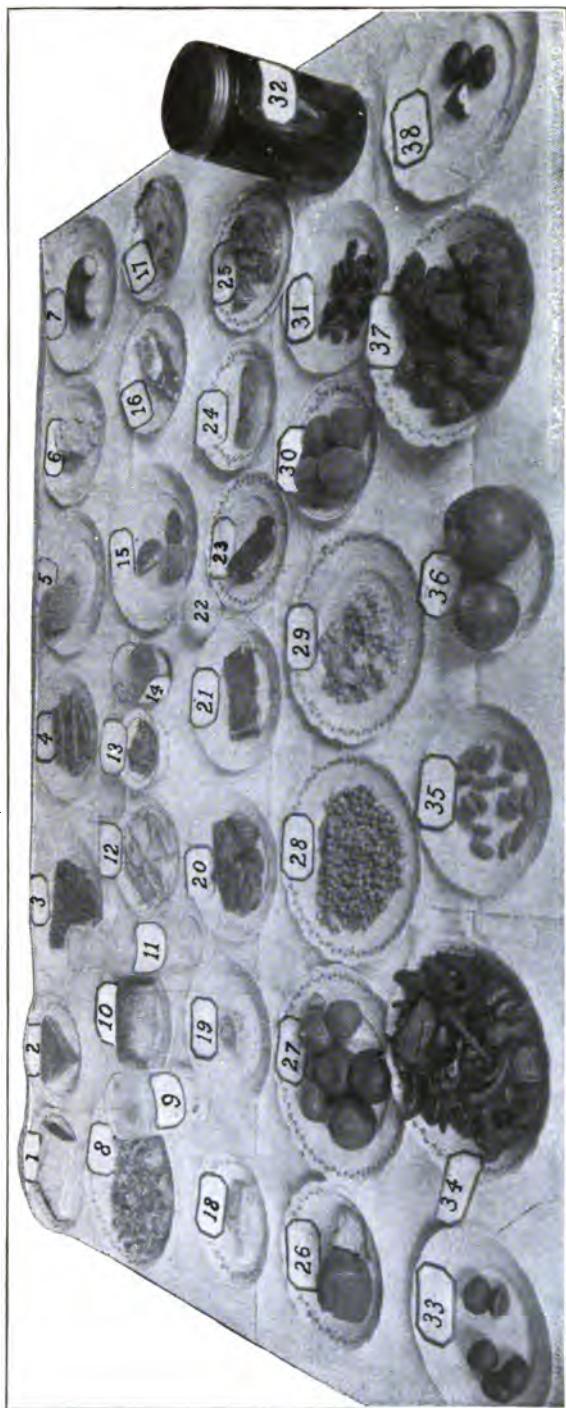
4. *Pupil Problem III*: Carefully calculate the menu for one day for one person. Complete work on the day's menu given below and on page 223, and plan other days' menus in a similar way.

"S. P." means standard portion of 100 calories. State any multiple or fractional part of a 100-calorie portion, just as desired. Refer to a table by Fisher or another authority for data *a* and *d*. The calories furnished by the daily protein should constitute 10-15 per cent of the total calories furnished for the day (this is a safe and average rule to follow).

If she so desires, the pupil may complete the following menu in such a way that the total number of grams of protein and also the total calories for the day shall be in accordance with the pupil's own requirement for one day. (The total daily calorie demands of the pupil can be roughly estimated by multiplying her body weight by 16-18. These figures represent the number of calories per pound required by the pupil according to the amount of exercise taken.)

Breakfast:

KIND OF FOOD	a. QUANTITY IN A S. P. (Give data in oz. only when necessary)	b. NUMBER OF S. P. SERVED	c. TOTAL CALORIES SERVED	d. PROTEIN CALORIES SERVED
Cantaloupe	½ ordinary serving	2	200	6
Shredded wheat	1 biscuit	1	100	13
Milk, whole	1 small glass	1	100	19
Beef, round	Ordinary serving	1	100	90
Boiled rice	Ordinary cereal dish	½	50	10
Corn bread
Butter
			Total:	Total:



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DR. FISHER'S 100-CALORIE PORTIONS OF COOKED FOODS

(From Norton, *Food and Dietetics*)

KEY

- | | | |
|------------------------------|--------------------------------|-------------------------------|
| 1. White bread, 1.3 oz. | 21. Fat roast beef, 0.56 oz. | 31. Raisins (seeded), 1 oz. |
| 2. Corn bread, 1.3 oz. | 22. Eggs, 2.1 oz. | 32. Consommé, 29 oz. |
| 3. Brown bread, 1.5 oz. | 23. Lamb chop, 0.96 oz. | 33. Olives, 1.1 oz. |
| 4. Graham crackers, 0.82 oz. | 24. Bacon, 0.53 oz. | 34. Pickles, 14.6 oz. |
| 5. Sponge cake, 0.89 oz. | 25. Canned salmon, 1.5 oz. | 35. Almonds, 0.53 oz. |
| 6. Frosted cake, 0.98 oz. | 26. Baked potato, 3 oz. | 36. Apples, 7.3 oz. |
| 7. Doughnuts, 0.8 oz. | 27. Beets, 8.7 oz. | 37. Strawberries, 9.1 oz. |
| 8. Corn flakes, 0.97 oz. | 28. Canned green peas, 6.3 oz. | 38. Chocolate creams, 0.9 oz. |
| 9. Milk, 4.9 oz. | 29. Succotash, 3.5 oz. | |
| 10. Shredded wheat, 0.94 oz. | 30. Peaches, 10 oz. | |

Luncheon:

Macaroni.....				
Cheese, American				
Butter.....				
Tomatoes, fresh..				
Rolls.....				
Strawberries....				
Sugar, granulated				
			Total:	Total:

Dinner:

Veal, leg.....				
Potato chips.....				
Carrots, cooked ..				
Butter.....				
Bread, white.....				
Olives, green.....				
Orange.....				
			Total:	Total:
			Total for day:	Total for day:

5. *Pupil Problem IV*: See Carlotta C. Greer, *A Text-Book of Cooking*, page 364.

6. *Pupil Problem V*: List 100-calorie portions according to their comparative costs, using the following headings:

GROUP I Less than 1 cent per 100 calories	GROUP II 1-2 cents per 100 calories	GROUP III 2½-5 cents per 100 calories	GROUP IV Over 5 cents per 100 calories

Let the pupil, if possible, bring the following prices up-to-date (note that the time may come when the housewife will buy largely in terms of calories):

COST IN CENTS OF 1,000 CALORIES¹

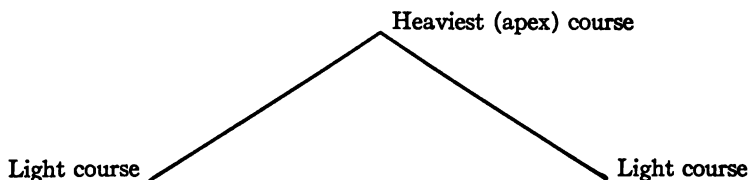
Glucose.....	1 $\frac{3}{8}$
Corn meal.....	2
Wheat flour.....	2 $\frac{1}{2}$
Oatmeal.....	2 $\frac{3}{8}$
Cane sugar.....	3 $\frac{1}{8}$
Dried beans.....	4
Salt pork (fat).....	4 $\frac{1}{2}$
Rice.....	5
Wheat bread.....	5 $\frac{1}{8}$
Oleomargarine.....	7 $\frac{1}{2}$
Potatoes.....	7 $\frac{1}{2}$
Butter.....	10
Milk.....	10
Smoked ham.....	10 $\frac{3}{4}$
Cheese.....	11 $\frac{3}{8}$
Loin pork.....	12 $\frac{1}{4}$
Mutton (leg).....	16 $\frac{1}{4}$
Salt cod.....	19 $\frac{1}{2}$
Sirloin beef.....	24
Turkey.....	40
Codfish steak (fresh).....	42

¹ Graham Lusk, *The Fundamental Basis of Nutrition*, 1914, page 44.

PART D. PLANNING AND SERVING OF MEALS FOR THE NORMAL ADULT¹

DIAGRAM (TRIANGLE) TEST FOR MENUS

Every correct menu passes the following diagram test (the object of the test is to point out the comparative weight of courses):



Every correct menu has a central motive, the same as any other design. Two or more heavy courses are avoided; one heavy course is provided, and it is much heavier than the other courses. The courses lead up scale to the heavy course, then down scale to a light course; courses of moderate weight may be found between the heavy and light courses on either side of the scale. A breakfast is usually simply up scale only.

Notes:

1. Note the application of the diagram test to three typical menus:

BREAKFAST	LUNCHEON	DINNER
<p><i>Courses:</i></p> <p>Fruit Cereal Protein-food course (egg, meat, or fish)</p>	<p><i>Courses:</i></p> <p>Soup Protein-food course (usually an entrée, such as a meat entrée) Salad Dessert</p>	<p><i>Courses:</i></p> <p>Soup Fish (small serving) Meat Salad Dessert</p>
<p><i>Diagram:</i></p>	<p><i>Diagram:</i></p>	<p><i>Diagram:</i></p>

It is a good plan to submit all menus to the diagram test. Let the pupil diagram various good and poor menus; for example: menus given on pages 230-239; a Thanksgiving-dinner menu; a banquet menu.

¹It is suggested that the teacher assign three lessons to consist respectively of the serving of (a) a simple breakfast, (b) a simple luncheon, and (c) a simple dinner. (For detailed notes on serving, see Lucy G. Allen, *Table Service*, 1919.)

2. Note various other terms which may be applied to the heaviest course of a menu:

Primary course (light courses are secondary)	Main course
Basic course	Main protein-food course
Essential course	Climax (or apex) course

In general, the term heavy as applied to soups, etc., means courses of high fuel (caloric) value; the term light means courses of low fuel value.

3. The smaller the number of courses in any menu, the heavier *all* the courses (soup, entrée, salad, dessert, etc.) should be; for example: Serve a heavy cream soup in a one-course or in a two-course luncheon; serve a very light cream soup in an eight-course luncheon. Serve a heavy salad in a one-course or a two-course luncheon; serve a light salad in an eight-course luncheon. Serve a clear soup with a hearty dinner; serve a semi-heavy soup (such as a cream soup) with a light dinner. Serve a heavy dessert in a three-course dinner; serve a very light dessert in an eight-course dinner.

However, in general, the following statements are true (by dinner in this note is meant a dinner of several courses):

Soup: A luncheon or supper soup is heavy or semi-heavy (occasionally light); a dinner soup is light. Light soups are clear in most cases.

Meat: The meat course for a luncheon or a supper consists of a light meat or a meat substitute; a dinner meat is heavy.

Salad: A luncheon or a supper salad is often heavy; a dinner salad is very light (generally head lettuce, chicory, water-cress, cucumbers, tomatoes, oranges, or other light vegetables or fruits, served with French dressing; avoid mayonnaise or very heavy cooked dressing for a dinner salad).

Dessert: A luncheon or supper dessert is heavy or light; a dinner dessert is light.

Suggestions for heavy courses (pupil to make additions to the lists):

Soup course:

Cream soups, thick (purées, such as pea, bean, or lentil)
Chowder, or stew (clam, oyster, corn, etc.)
Bisque (such as oyster, clam, scallop, or lobster)

Main protein-food course:

Most meat dishes
Some fish dishes
Dried-legume dishes (such as baked beans)

Salad course:

Meat (or other protein food) with mayonnaise
Potatoes (or other heavy vegetable) with mayonnaise
Complete-dish salad with mayonnaise

Dessert course:

Mincemeat and some other pies (with or without cheese)
Plum pudding and some other puddings
Ice cream and cake
Nuts and raisins
Crackers and cheese (a dessert substitute or supplement)

Suggestions for light courses (pupil to make additions to the lists):

Relish course, such as a fruit relish or a canapé (see outline, below, on hors d'œuvres)

Soup course:

Bouillons	} hot or iced
Consommés	
Broths (often jellied)	
Fruit soups	
Cream soups, thin	

Main protein-food course (this course in a luncheon is often classed as an entrée):

Cold meats, sliced
 Escalloped protein foods (eggs, fish, etc.)
 Protein-food croquettes
 Complete dishes, so-called (see *Food Economy*, pages 43-104), such as:
 Creamed protein foods on toast
 Stuffed juicy vegetables
 Hash

Salad course:

Salad green (such as lettuce) with French dressing
 Juicy fruit or vegetable with French dressing
 Gelatin jelly with French dressing

Dessert course:

Most fruits, either raw or stewed
 Simple gelatin desserts
 Ices and sherbets

4. Broadly speaking, heavy courses may be termed cold-weather courses; light courses, hot-weather courses.

5. Clear soups have very little value except as appetizers.

All hot soups are stimulating because hot liquids are so quickly absorbed. Meat soups (clear or heavy) have additional stimulating value because of the extractives.

HORS D'ŒUVRES

1. *Definition:* Hors d'œuvres may be broadly defined as beginnings, appetizers, relishes, or savories. Webster says an hors d'œuvre is "a dish served as a relish usually at the beginning of a meal" (dinner or luncheon). Hors d'œuvres are served hot or cold.

2. *Essentials:*

Small size of serving
 Neatness and daintiness in appearance
 Piquancy in flavor

3. *Types:*

a. Canapés (small strips or other forms of toast with a covering or canopy of savory material; see page 228)

b. Fish cocktails, prepared from any of the following:

Clams	Sardines
Crabs	Scallops
Lobsters	Shrimps
Oysters	Tuna fish

c. Fruit relishes (see *Diet for Adults*, pages 121-124)

d. Miscellaneous relishes, such as:

- Caviare
- Fish, marinated
- Fish, smoked (such as salmon and herring)
- Oysters and clams, served raw on the shell
- Sardines (served in various ways)
- Meats, cold, sliced very thin, such as:
 - Chicken livers
 - Goose livers
 - Ham
 - Sausage of various kinds
 - Tongue
- Meats, potted or deviled
- Cucumbers, fresh
- Olives
- Radishes
- Pickles (gherkins, etc.)
- Tomatoes, small

General Method for Canapés

1. Cut $\frac{1}{4}$ "- $\frac{1}{8}$ " slices of stale white or brown bread in any of the following forms:

- Diamonds
- Horseshoes
- Leaves
- Rectangles
- Rounds
- Stars
- Strips, 4" x $1\frac{1}{2}$ "
- Etc.

 brown (toast) the bread by any of the following methods:

- Toasting on a toaster
- Baking (butter the bread before placing it in the oven)
- Frying
- Sautéing

3. Spread the toast with savory or plain butter.

4. Spread the toast with one or any suitable combination of the following savory foods (well seasoned):

- Anchovy butter
- Caviare
- Cheese, cream or grated
- Crab or lobster meat, minced
- Eggs, hard-cooked in the shell (sliced or chopped)
- Fish, cooked or smoked (minced)
- Meat, cooked and minced (bacon, ham, chicken, tongue, etc.)
- Sardines (whole or boned and ground to a paste)
- Vegetables (mushrooms, sliced tomatoes, etc.)

5. Place each serving on a small plate set on a service plate, and serve it hot or cold after garnishing with any of the following:

Parsley	Olives
Pimentos (especially good with cheese)	Savory butter or cream put
Radish roses	through a pastry tube

(Canapés are eaten with a fork, or with the fingers if necessary.)

ENTRÉES

1. *Definition:* An entrée is a light, savory, made dish served at dinner or luncheon between the main, or regular, courses. An entrée (usually protein food) is often served after the soup or fish course of a dinner or luncheon; an entrée (usually vegetable) is often served after the meat, or heavy, course of a dinner or luncheon.

Most entrées are served hot, but some are served cold (iced or not). Entrées are not served at table as a rule; that is, they are brought to the table on individual plates. Entrées are probably the cook's best means of utilizing left-overs.

2. *Food value:* Entrées are classified as substantial or light, according to their food value. Some entrées are so substantial that they may be used as the main protein-food courses of luncheons and informal dinners.

The foundation of an entrée consists of one of the following:

Protein foods:

Meat or poultry

Fish

Egg

Cheese

Vegetables (French artichokes, asparagus, mushrooms, etc.)

Fruit (occasionally used)

3. *Typical hot entrées:*¹

Creamed protein foods, such as:

Sweetbreads on toast

Goldenrod eggs

Chicken à la king

Welsh rabbit

Chicken in Swedish timbales

Stuffed juicy vegetables (such as peppers, tomatoes, and egg plant)

Timbales (chicken, fish, etc.; often prepared from force-meat)

Soufflés, savory (fish, meat, cheese, etc.)

Croquettes (protein-food and complete-dish croquettes)

Fricassées

Casserole and ramekin dishes (escaloped foods, etc.)

Meat pies (chicken, etc.)

Pritters

4. *Typical cold entrées:*

Aspic jelly

Chaud-froids (chicken, sweetbread, etc.)

¹For many recipe suggestions, see *Food Economy*, pages 43-104 (the complete-dish series); *Diet for Adults*, pages 136-138 (savory soufflés).

TYPICAL MENUS

TYPICAL HOME-BREAKFAST MENUS¹

Breadstuffs and other accompaniments are considered to a certain extent in these menus. For further suggestions as to accompaniments see Notes 1 and 2.

One-course breakfasts (see Note 3):

{ Beverage, cereal (with or without fruit)	{ Beverage, breadstuff, sweet relish
{ Beverage, breadstuff	{ Beverage, breadstuff, protein food

Two-course breakfasts:

{ Cereal	{ Fruit
{ Beverage, breadstuff	{ Beverage, breadstuff
{ Cereal	{ Fruit
{ Beverage, breadstuff, protein food	{ Beverage, breadstuff, protein food

Three-course breakfasts:

{ Fruit	{ Fruit
{ Cereal	{ Cereal
{ Beverage, breadstuff	{ Beverage, breadstuff, protein food

Notes:

1. Select the foods from the following list:

Fruits:

Dried fruits, raw or stewed:

Apricots	Pears
Dates	Prunes
Figs	Raisins
Peaches	Etc.

Fresh juicy fruits, raw:

Apples	Melons (such as muskmelon and watermelon)
Bananas	Oranges
Berries	Peaches
Cherries	Pears
Grapefruit	Plums
Grapes	

Fresh juicy fruits, baked:

Apples	Pears
Bananas	Etc.

Fresh fruits, stewed, steamed, or canned:

Apples	Pears
Berries	Plums
Peaches	Etc.

Cereals:

Home-cooked (rice, oatmeal, etc.)

Factory-cooked or prepared (such as corn flakes and shredded wheat)

¹A brace signifies a menu; each line included in the brace signifies a course.

Protein foods (basis of protein-food course):

Eggs (cooked as omelets or in various other forms)
 Fish, dried (mackerel, codfish balls, creamed codfish, finnan haddie, etc.)
 Fish, fresh
 Meat:
 Bacon (often served with eggs)
 Chops
 Frizzled beef (on toast)
 Ham (often served with eggs)
 Hash
 Liver (calf or beef)
 Meat balls
 Sausage
 Steak (small serving)
 Etc.

Accompaniments (often omitted), other than breadstuffs, to protein foods:

Sautéed juicy foods (such as apples or tomatoes)
 Sautéed starchy foods (such as potatoes, mush, or rice cakes)
 French toast
 Hominy or rice, boiled
 Potatoes (creamed, baked, etc.)

Breadstuffs:

Biscuits (baking-powder, etc.)
 Biscuits (so-called) prepared from wheat or other cereal flakes
 Bread, yeast or quick (white, brown, bran, corn, etc.)
 Crackers
 Fritters (corn, apple, etc.)
 Griddlecakes (wheat, corn-meal, buckwheat, etc.)
 Muffins, English
 Muffins, or gems (bran, blueberry, corn-meal, graham, oatmeal, wheat, whole-wheat, etc.)
 Popovers
 Rolls, bread
 Sweetstuffs (sometimes served at the end of the meal), such as:
 Drop cakes (ginger, honey, etc.)
 Cookies (bran, oatmeal, etc.)
 Doughnuts
 Sweet wafers and crackers
 Toast (plain or zwieback)
 Waffles

Beverages (milk and cocoa have high protein value)

Cereal beverages
 Cocoa (chocolate is usually considered too rich for breakfast)
 Coffee
 Milk
 Tea

Sweet relishes (often served with toast, muffins, or other breadstuff):

Honey
Jams
Jellies
Marmalades
Preserves
Sirups (such as maple)

Breadstuffs are served hot for the most part. Two kinds of breadstuffs, such as toast and griddlecakes, are often served in a menu. Waffles, griddlecakes, or fritters are sometimes served as a course by themselves.

2. The following accompaniments are understood in all of the menus:

Cream and sugar accompany cereals and beverages.

Butter accompanies most breadstuffs.

A sweet relish (such as sirup or honey) or meat gravy accompanies waffles, griddlecakes, and fritters.

3. The continental breakfast, a one-course meal, usually consists of one of the following:

Rolls and café au lait (very popular on the European continent)

Rolls and tea (popular with many of the English)

4. Note in the given menus the evolution (by the addition of courses) of the more complex breakfast from the simple one-course breakfast.

5. Let the pupil suggest other menus for one-, two-, and three-course breakfasts. If desired, specify in each course the name of the fruit, cereal, or other food served. Consider both cold-weather and hot-weather menus.

TYPICAL LUNCHEON MENUS¹

As a rule, breadstuffs and other accompaniments are understood, if not specified in these menus; they are considered fully in Note 1.

One-course luncheons:

{ Soup	
{ Salad	
{ Light meat or fish (such as chops), potatoes, a second vegetable, light salad	
{ Meat entrée, light salad	

Two-course luncheons:

{ Soup	{ Light meat or fish
{ Dessert	{ Dessert
{ Salad	{ Meat entrée
{ Dessert	{ Dessert

Three-course luncheons:

{ Relish	{ Soup	{ Meat entrée
{ Light meat or fish	{ Meat entrée	{ Salad
{ Dessert	{ Dessert	{ Dessert

Four-course luncheons:

{ Relish	{ Soup
{ Light meat or fish	{ Meat entrée
{ Salad	{ Salad
{ Dessert	{ Dessert

¹A brace signifies a menu; each line (or section) included in the brace signifies a course.

Eight-course luncheon:

- Relish, or appetizer (see pages 227-228)—one of the following:
 - Fruit relish
 - Raw oysters or clams
 - Canapé
 - Any of the larger hors d'œuvres
- Soup (such as bouillon or consommé)
- Entrée, prepared from one of the following:
 - Fish
 - Poultry
 - Meat
 - Mushrooms
- Light meat, such as one of the following (a meat sauce, a relish, and one vegetable, such as peas with chops, may accompany the meat):
 - Fillet of beef
 - Broiled fillet of chicken
 - Lamb chops
 - Chicken pie or other casserole dish
- Vegetable entrée
- Salad
- Dessert
- Demi-tasse

Notes:

1. The following notes apply to luncheon menus in general, including the foregoing menus:

- a. Wafers, celery, and olives are usually understood in the soup course if not listed in the menu.
- b. Usual accompaniments to the heaviest course are as follows (note that the heaviest course may be meat, salad, soup, or other dish):
 - Bread or rolls and butter
 - Relish (such as pickles, jelly, or celery)
 - Beverage (such as tea, coffee, cocoa, chocolate, or milk)
 A very light salad sometimes accompanies a meat or a meat-substitute course.
- c. Entrées prepared from meat substitutes, such as the following, may be substituted for meat entrées (escaloped and other casserole dishes are very popular):
 - Eggs
 - Fish
 - Cheese
 - Beans (such as baked beans)
- d. Wafers or a simple sandwich (such as bread and butter) and cheese are usually understood in the salad course, if not listed in the menu.
- e. Relishes, such as almonds, celery, and olives, are an important part of menus (this is true of dinners as well as luncheons).

Luncheon (as well as supper) soups are correctly served in bouillon, or two-handled, cups, except that iced soups (see list, page 227) are sometimes served in sherbet cups.

At a formal luncheon a demi-tasse is served after the dessert.

2. Note in the given menus the *evolution* (by the addition of courses, often unimportant ones) of complex luncheons from a simple one-course luncheon.

3. Let the pupil suggest other menus for one-, two-, three-, and four-course luncheons. If desired, specify in each course the name of the relish, soup, or other food served.

4. An eight-course, or formal, luncheon is similar to an eight-course dinner except that the heavy meat course is omitted, the soup is served in bouillon cups, and one or two other changes are made.

5. Suppers are similar to informal luncheons. Both suppers and luncheons are lighter meals than dinners, and both offer fine opportunity for the use of left-overs. The following is a menu for a typical family supper:

Cream soup (often omitted)

Light meat or a meat-substitute course (usually hot), such as:

Meat (cold-sliced meat, dishes prepared from left-over meat, etc.)

Fish (dishes prepared from left-over fish)

Eggs

Cheese (macaroni and cheese, cheese fondue, etc.)

Dried legumes (beans or peas)

Simple dessert, usually some form of sweets (such as fresh, stewed, or preserved fruit, accompanied by cookies or ginger or other cake)

The following are the usual accompaniments to the main protein food served at supper:

Potatoes in almost any form (mashed not usual)

Bread and butter or other breadstuff

Relish

Beverage (milk, cocoa, or tea)

Escalloped dishes of all kinds are a convenient type of supper dish. Members of the complete-dish series (see *Food Economy*, pages 43-104) are also useful.

TYPICAL DINNER MENUS¹

As a rule, breadstuffs and other accompaniments are understood, if not specified in these menus; they are considered fully in Note 1.

One-course dinner:

{ Protein food (accompanied or not by salad)

Two-course dinners:

{ Soup	{ Protein food	{ Relish
{ Protein food	{ Dessert	{ Protein food

Three-course dinners:

{ Soup	{ Relish	{ Protein food
{ Protein food	{ Protein food	{ Salad
{ Dessert	{ Dessert	{ Dessert

Four-course dinners:

{ Relish	{ Soup
{ Protein food	{ Fish
{ Salad	{ Main protein food (meat, accompanied by salad)
{ Dessert	{ Dessert

¹A brace signifies a menu; each line (or section) included in the brace signifies a course.

Five-course dinners:

{ Relish	{ Soup
{ Soup	{ Fish
{ Meat	{ Main protein food (meat)
{ Salad	{ Salad
{ Dessert	{ Dessert

Ten-course dinner, or banquet:

{ Relish, or appetizer—choice of one, sometimes two, of the following (two separate relish courses are often served):
Fruit relish
Raw oysters or clams
Canapé (such as caviare or cheese)
{ Soup
{ Fish
{ Meat entrée (such as sweetbreads on toast)
{ Meat (heaviest course of the meal)
{ Vegetable entrée (such as stuffed tomatoes)
{ Sherbet
{ Game. Green salad
{ Dessert
{ Demi-tasse. Crackers and cheese

Notes:

1. The following notes apply to dinner menus in general, including the foregoing menus:
 - a. Crackers or a substitute, and often celery and olives, are understood in the soup course if not listed in the menu.
 - b. Olives or celery usually are understood in fish course if not listed in menu.
 - c. The main protein-food course consists of a hot meat or a substitute, accompanied, as a rule, by all of the following (see *Food Economy*, page 49, Note 5):
 - One hot starchy vegetable (usually white or sweet potatoes) or one of the following hot substitutes:
 - Cereal (such as rice, hominy, or pearl barley)
 - Flour paste (macaroni, spaghetti, etc.)
 - Chestnuts, boiled or roasted
 - Bananas (baked, sautéed, etc.)
 - One or two hot succulent, or juicy, vegetables, such as:
 - Greens (spinach, beet tops, etc.)
 - Green corn
 - String beans
 - Bread and butter
 - One or two relishes, such as:

Celery	Olives or other pickles
Jelly or marmalade	Radishes
Nuts, salted (such as almonds)	
 - A light salad sometimes accompanies the main protein-food course, often taking the place of a hot succulent vegetable.
 - d. Wafers or a simple sandwich (such as bread and butter) and cheese usually are stated or understood in the salad course.

- e. A beverage, served, as desired, at any of the following times, is understood if not listed in each menu:

With main protein-food course (informal)

With dessert

After dessert (formal; usually demi-tasse)

Coffee or tea is the usual dinner beverage, although cereal beverage, milk, cocoa, or chocolate is sometimes served at an informal dinner.

2. Note in the given menus the evolution (by the addition of courses, often unimportant ones) of complex dinners from a simple one-course dinner. A dinner of several courses is called a formal dinner.

3. Let the pupil suggest other menus for one-, two-, three-, four-, and five-course dinners. If desired, specify in each course the name of the relish, soup, or other food served, as in the following typical dinner menus:

Clear soup	Potatoes	Bread sticks
Roast bee		Spinach
Olives		Bread
Lettuce salad	Lemon jelly	Wafers
	Coffee	

Olives	Little neck clams	Celery
Bisque-of-tomato	Crackers	Pulled bread
Broiled tenderloin steak		Béarnaise sauce
Potato soufflé		Creamed cauliflower
Cress salad	Peach charlotte	Cheese straws
	Coffee	

	Amber soup	Almonds
Olives	Broiled salmon steak, maitre d'hôtel sauce	
	Roast turkey cranberry jelly	
French peas	Mashed potato	Escalloped parsnips
	Nut salad	
	Cheese straws	
	Imperial charlotte	
Cakes	Coffee	Ginger

Let the pupil count the number of courses in each of the three foregoing menus. And note the form in which the menus are written.

4. A dinner of many courses, as it is usually served, is poor in that it has more than one heavy course, and does not pass the diagram test. However, it is possible for a truly expert chef to plan a banquet menu so that it is correct dietetically.

Let the pupil prepare a menu for a ten-course dinner (stating roughly the quantities in each serving), then treat it as follows:

a. Submit it to the diagram test, page 225.

b. Designate which of the courses are essential and which nonessential.

5. A good dinner, like a good story, has a climax; for example, some attractive looking dish for dessert.

6. Let the pupil show that various dinner menus can be prepared from a given list of ingredients, such as:

Beef	Flour, etc., for breadstuffs
Potatoes	Pickles
Cabbage	Apples
Lettuce	Coffee

Plan four three-course dinner menus, using the above ingredients (in the form of any recipes desired) as the basis of each menu.

As an additional exercise, state the quantities of ingredients required to serve each menu to a group of six persons, then list the menus in sequence according (a) to their approximate cost, and (b) to the labor involved in their preparation.

BALANCE, VARIETY, HARMONY, AND CONTRAST IN MENUS

BALANCE OF FOODSTUFFS IN MENUS

This exercise aims to demonstrate the necessity of balance of foodstuffs in menus.

Let the pupil criticize and, if necessary, revise the menus given in the left-hand column.

BREAKFAST MENU	CRITICISM	REVISED MENU
Hominy and sliced bananas Griddlecakes and sirup Coffee		
LUNCHEON MENU	CRITICISM	REVISED MENU
Cream-of-potato soup Creamed chicken Sweet potatoes Muffins Farina pudding		
Bacon Sautéed potatoes Beet salad with mayonnaise Ice cream Doughnuts Chocolate		

LUNCHEON MENU	CRITICISM	REVISED MENU
Baked beans with brown bread Cheese soufflé Milk Floating island		
Lamb chops Creamed potatoes Hominy Rice pudding		
DINNER MENU	CRITICISM	REVISED MENU
Lentil soup Roast of beef Rice baked with cheese Baked custard		
Casserole of rice and meat Mashed potatoes Macaroni (no cheese) Chocolate cornstarch pudding		
Pot roast of beef Baked beans Potatoes Custard pie		
Veal cutlets Boiled white potatoes Baked sweet potatoes Lettuce Bread pudding		

Note:

Consider only the following foodstuffs in studying balance in the foregoing menus:

Protein	} chief energy foodstuffs
Starch and sugar	
Fats	

VARIETY OF FOODS IN MENUS

This exercise aims to show the necessity of lack of repetition in menus.

In supplying data for the following table, let the pupil criticize the menus from the standpoint of variety.

LUNCHEON MENU	CRITICISM	REVISED MENU
Cream-of-tomato soup Wafers Steak Baked potatoes Tomato salad Pie	Tomatoes are served in two courses.	
Cream-of-spinach soup Wafers Fish Creamed potatoes Sliced cucumbers Fresh fruit		
Chicken broth Chicken croquettes Escalloped potatoes Asparagus salad Fruit shortcake		

HARMONY OF FOODS IN MENUS

This exercise aims to show the necessity of correct combination of dishes in menus.

Let the pupil state examples of food combinations according to the following headings:

HARMONIOUS COMBINATIONS	INHARMONIOUS COMBINATIONS
	Sour pickles with bread and milk

Note:

Each course in a meal should constitute a harmonious combination with regard to color, flavor, form, texture, and temperature, and should be correct from the standpoint of digestion.

CONTRAST OF FOODS IN MENUS

This exercise aims to show the value of contrast of foods in menus.

Let the pupil enter the following and other contrasts in the given table:

- Crisp wafers or croutons with cream soups
- Sour sauce or relish with fish
- Cranberry sauce with chicken or turkey
- Apple sauce with pork or goose
- Dry¹ vegetables with stew and other moist meat dishes
- Creamed potatoes and a second vegetable which is dry with a dry¹ meat (avoid gravies and cream sauces other than sauce used in creamed potatoes)
- Interior of croquettes creamy, crust crisp
- Creamed dishes (such as fish) with buttered crumbs on top and baked until crisp
- Tomato sauce with spaghetti
- Cream cheese with head lettuce
- Salad (cold), dessert (hot)
- Hot chocolate sauce with ice cream
- Acid sauces with rich puddings
- Plain cakes (angel and sponge cakes, etc.) with rich desserts, such as ice creams containing whipped cream; avoid rich cakes
- Cheese with crackers

CONTRASTS	EXAMPLES OF SUCH CONTRASTS
Strong-flavored versus mild-flavored.....
Sour versus sweet.....
Plain versus rich.....
Hot versus cold.....
Crisp versus soft.....
Dry (not crisp) versus moist.....
Concentrated versus dilute.....

¹The term dry as applied here to vegetables and meats means absence of sauce, at least in any quantity.

SETTING A TABLE "COVER"¹

1. *Plate*: This marks the center of the cover.
2. *Knife or knives*: At right of plate with the sharp edges toward the plate. (Exception: butter spreader, which is laid across the farther side of or beside the bread and butter plate.)
3. *Fork or forks*: At left of plate. (Exception: oyster fork, which is placed at right of all knives and spoons at right of cover and preferably parallel to them.)
4. *Spoon or spoons* of all kinds at right of plate, with the following exceptions:
 - a. Teaspoons are sometimes placed on the table above the plate, with the handles to the right.
 - b. Some of the spoons, especially the small dessert sizes, are sometimes brought on with their respective courses.
5. *Tumbler or goblet*: At tip of largest knife.
6. *Bread and butter plate*: A little to the left of the tip of the forks.
7. *Cup and saucer*: At right of all the cover equipment and 6"-7" from the edge of table. The cup handle should be turned slightly toward the guest, but should be at almost a right angle to the knives.
8. *Individual salt and pepper*: On the table above the plate, or between two "covers."
9. *Finger bowl*: In center of cover, as a rule; sometimes at left of cover.
10. *Napkin*: Usually at left of forks, with the open (monogram) corner to the right and toward edge of table. The napkin is sometimes placed in center of cover; for example, on the service plate when the latter is not otherwise used.
11. *Place-card and menu card*: On napkin, as a rule.

Notes:

1. A service plate is a large (about 10"), handsome plate, placed in the center of each cover before the meal is announced. In general, it is used or not as follows:
 - a. Used under relishes and soup
 - b. Not used under heavy meat course
 - c. Sometimes returned for entrée which follows the meat course
 - d. Not used under salad and desserts
2. Note choice of positions for the salad plate:
 - In center of cover
 - At left, or at right occasionally, of the plate in center of cover (when salad is served with the main course)
3. The best scheme for silver is to arrange it in sequence according to *use*, placing farthest from the plate the piece which is to be used first. In many cases the spoons will thus fall at the right of knives.
 - Silver is laid with the ends of handles in a straight line with the edges of plate and napkin, and 1" from edge of table. Why?
 - As a rule, avoid more than five or six pieces of silver in setting a cover.
4. Each of the following should be placed right side up on the table:
 - Tines of forks
 - Bowls of spoons
 - All china and glassware (such as plates and goblets)

¹A cover is the space (about 22"-30" wide and 15"-16" deep) with its china, glassware, silver, and linen allowed each person at the dining table.

5. One or both of the following, according to the polish of the table, should be spread under the tablecloth (the silence cloth by itself is usually sufficient):

Pad (such as asbestos or oilcloth)

Silence cloth (such as felt or heavy cotton flannel)

The pad and the cloth protect the table, deaden sounds, and give a better appearance to the linen.

6. The table cloth should suspend about 10" over the ends and sides of the table. Doilies with pads underneath or table runners are often used as substitutes for a tablecloth at breakfast, luncheon, supper, or an informal family dinner.

7. *Pupil problem:* A summary of the foregoing outline on the setting of a table cover:

Let the pupil list plates, silver, and other cover equipment according to the positions mentioned in the headings of the table below:

	CENTER OF TABLE COVER (ON OR OFF SERVICE PLATE)	TO RIGHT OF PLATE	TO LEFT OF PLATE	ON TABLE ABOVE PLATE
Always				
Occasionally				

8. *Pupil problem:* Let the pupil diagram table covers as follows, after filling in the blank spaces in the lists at the right of the illustrations (in each diagram specify the course under discussion):

Page 244: A cover for each of three home (informal) meals, breakfast, luncheon, and dinner.

Page 245: A cover each for a formal luncheon and a formal dinner.

Use the foregoing outline as a guide; also standard books on serving.

PASSING, PLACING, AND CLEARING OF DISHES

*To the left for all table service*¹ is the simplest and least confusing rule; that is, the waitress in performing all of the following processes stands at the left of the person who is being served. (Exceptions: Beverages, salads occasionally, and also any silver or other equipment which belongs to the right of plate are placed and removed from the right.) The waitress stands at the left of the person who is being served, whether she is passing a dish from which he is to help himself, or setting down or removing a plate, unless the article belongs to the right of the plate, such as a cup, glass, or spoon.

I. *Passing:* Method of serving whereby the guest is allowed to choose or to help himself. Food is *always* passed to the left of guest (thus enabling the guest to use his right hand easily).

II. *Placing:* Method of serving whereby the waitress places the food in front of the person being served.

¹Some authorities disagree with this rule.

III. *Clearing*: Remove equipment and crumbs in the sequence in which listed (silver and cutlery should not be separated from the dishes in which they have been used).

1. *General equipment*:

- a. Large dishes (platter, vegetable dishes, etc.)
- b. Smaller equipment (bread plate, pickle and jelly dishes, etc.)

2. *Individual equipment from covers* (plates, silver, salts, peppers, etc.)

3. *Crumbs*: Remove crumbs (from the left) before dessert, and between other courses if necessary. Brush the crumbs with a folded napkin to a clean plate (a crumb scraper is occasionally preferred.)

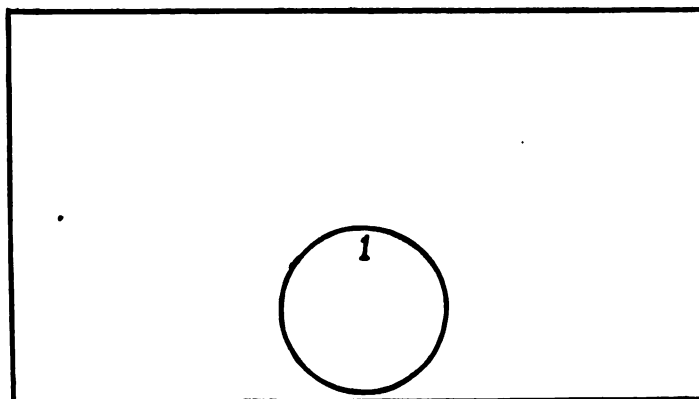
Notes:

1. Miscellaneous directions for the waitress:

- a. See that the person being served is made comfortable, and always with the idea of kindness. Remember that no work is menial unless it is made so.
- b. Note the following requisites for a good waitress:
 - Neatness and order
 - Speed, but not hurry
 - Quietness (talk as little as possible; wear rubber heels)
- c. Stand as erect as possible, hold tray level and low, and stand as nearly back of the person being served as convenient.
- d. Stand at left of person serving (usually host or hostess) in order to receive fresh dishes of food or to have dishes refilled.
- e. Both in serving and in removing dishes, if desired, use in place of a tray a folded napkin laid on the palm of left hand.
- f. In clearing the table, never pile dishes one on another on the tray or serving wagon or elsewhere in the dining-room. Much clatter is avoided in this way.
- g. Place chairs just to the edge of table, not under the table.
- h. Three-quarters fill the water glass and supply butter just before the meal is announced. See that the water glass is kept three-quarters filled throughout the meal (as a rule, fill it before each course), butter, bread, and rolls always supplied without being asked for, and other things at hand as needed. Serve cold foods cold and hot foods hot, serving them respectively on chilled and heated dishes.
- i. When dinner is ready announce that "dinner is served." Announce other meals in a similar way.
- j. Serve first the hostess or the woman guest of honor (the woman guest of honor is seated at the right of host; the man guest of honor at the right of hostess); the hostess is usually served first. Then serve the next person to the right around the table in succession, whether a man or a woman.

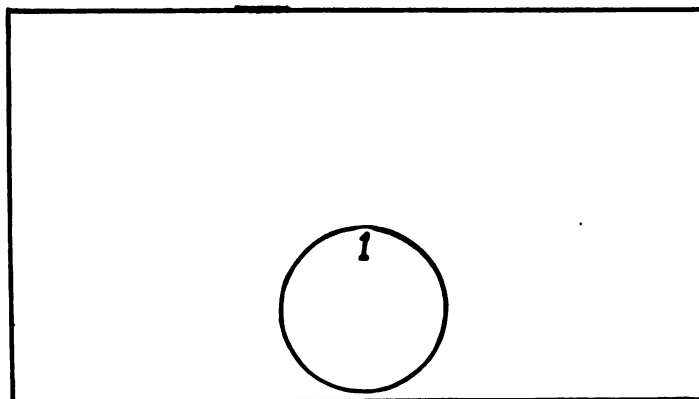
2. Note the three forms of service commonly in use to-day (let the pupil secure a definition of each of these from standard books on serving):

- English
- Russian
- Compromise



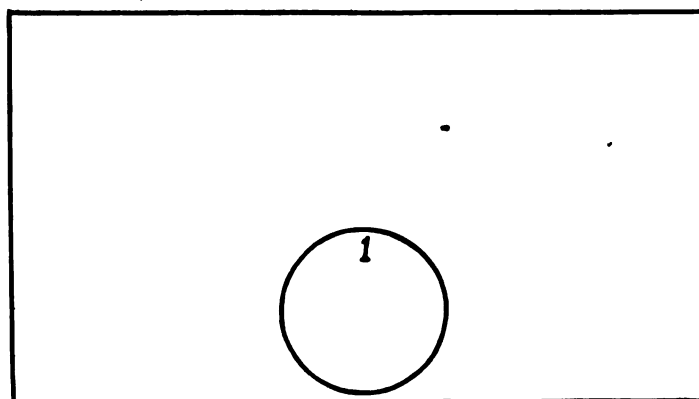
COVER FOR A SIMPLE BREAKFAST

1. Plate.....
2.
3. Knife.....
4. Fork.....
5. Spoon.....
6. Butter spreader....
7.
8.
9. Tumbler.....
10.
11.
12. Napkin.....
13.
14.
15.



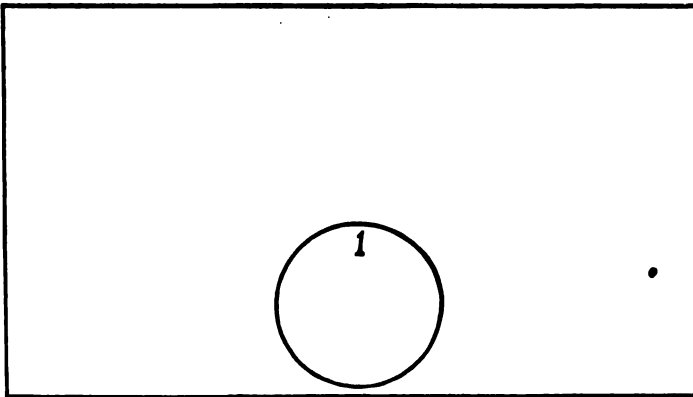
COVER FOR A SIMPLE LUNCHEON

1. Plate.....
2.
3. Knife.....
4. Fork.....
5. Spoon.....
6. Butter spreader....
7.
8.
9. Tumbler.....
10.
11. Bread and butter
plate.....
12. Napkin.....
13.
14.
15.



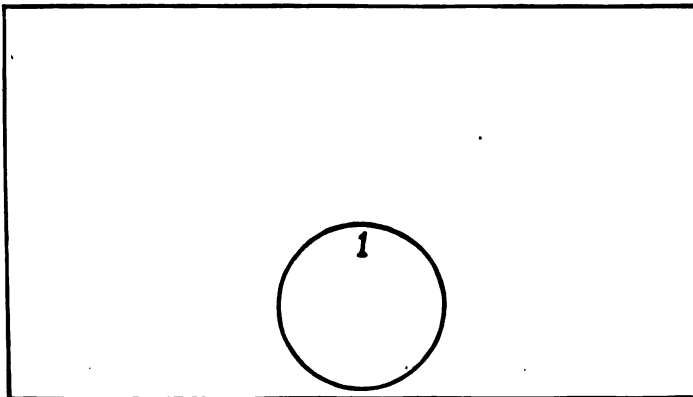
COVER FOR A SIMPLE DINNER

1. Plate.....
2.
3. Knife.....
4. Fork.....
5. Spoon.....
6. Butter spreader....
7.
8.
9. Tumbler.....
10.
11. Bread and butter
plate.....
12. Napkin.....
13.
14.
15.



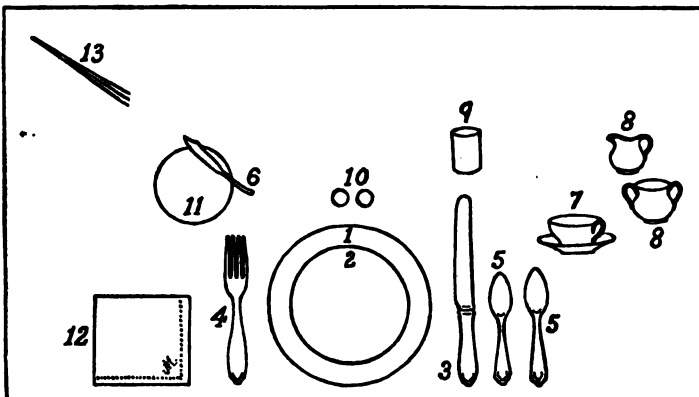
COVER FOR A FORMAL LUNCHEON

1. Service plate.....
2.
3. Knife.....
4. Fork.....
5. Spoon.....
6.
7.
8.
9. Goblet.....
10.
11.
12. Napkin.....
13.
14.
15.



COVER FOR A FORMAL DINNER

1. Service plate.....
2.
3. Knife.....
4. Fork.....
5. Spoon.....
6.
7.
8.
9. Goblet.....
10.
11.
12. Napkin.....
13.
14.
15.



A SIMPLE BREAKFAST TRAY
(Useful for invalids as well as normal adults)

1. Plate.....
2. Dish of food (such as fruit or cereal)
3. Knife.....
4. Fork.....
5. Spoon.....
6. Butter spreader....
7. Cup and saucer....
8. Individual creamer and sugar.....
9. Tumbler.....
10. Individual salt and pepper.....
11. Bread and butter plate.....
12. Napkin.....
13. Flower.....

STUDY OF GOOD TABLE MANNERS

The basis of good manners is a feeling for the comfort of other persons.

Pupil to state an important "do" or "don't" in regard to each of the points in the following table:

	"Do" or "Don't" AT TABLE
1. Use of soup spoon.....
2. Use of soup plate or cup
3. Use of knife.....
4. Use of fork.....
5. Place for knife and fork when plate is passed for a second serving.....
6. Place for tea or coffee spoon when not in use
7. Spreading of bread.....
8. Holding of goblet or glass of water or pitcher
9. Foods which may be taken in the fingers
10. Quantity of meat on the plate which may be cut by the individual at one time.....
11. Shifting and piling of dishes by the guest or waitress
12. Signal that person has finished a course.....
13. Reaching for dishes at a distance on the table
14. Passing dishes across or around the table.....
15. Speed with which food is eaten.....
16. Mastication
17. Remarks on the food served
18. Sneezing or coughing while person is seated at the table.....
19. Place for the hands when person is not eating
20. Elbows and forearms.....
21. Use of napkin during meal.....
22. Care of napkin at end of meal.....
23. Finger bowls.....
24. Toothpicks

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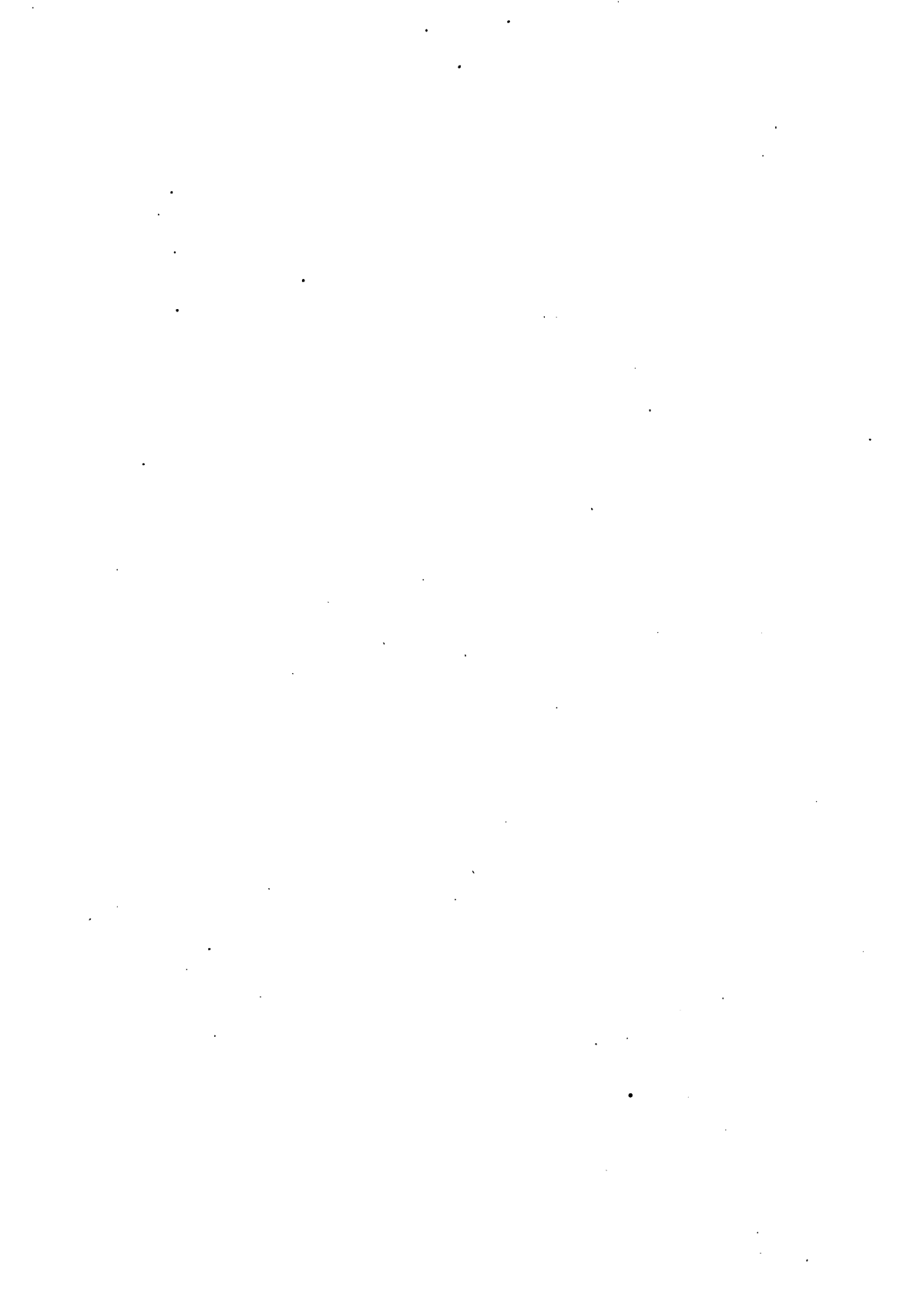
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